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BALTIMORE, OCTOBER 22, 1897.

Birmingham an Example.

Three months ago the Commercial Club of Birmingham, Ala., which has done much to foster and promote honest, active and enterprising trade and to advance the business interests and general prosperity of that city, selected as its industrial agent Major John W. Johnston. Entering at once upon his duties, he has since been occupied in studying important industries, in discussing processes, methods, costs and profits, and, as the Birmingham News says, "in representing advantages, meeting objections and receiving and giving information—all with the view of exciting and strengthening interest in Birmingham and its surroundings, and especially of securing the betterment of existing industrial plants, the establishment of new ones and the incoming of capital and population." With this object in view he has recently visited thirteen Northern and Western cities, including Columbus, Chicago, New York, Utica, Cleveland, Newcastle, Niles, Pittsburg, Allegheny, Providence, Lowell and Washington. Although he has not announced any definite results, and such could hardly be expected immediately, no one can doubt that the advertisement which Birmingham is receiving in this way will bear abundant fruit.

Supplementary to the work of Major Johnston, the Commercial Club has published a leaflet full of condensed information about the advantages of Birmingham. Topics discussed in brief are climate, altitude, taxes, property valuation, banks, volume of business, employes, railroads, schools, churches, water supply, sanitation, streets and lights, industries, coal, iron, steel, lumber and a variety of others which manufacturers, investors and business men generally will find useful.

The enterprise and energy of Birmingham thus freshly illustrated would do credit to other cities. This is an age of advertisement, and the city that recognizes that fact and which acts accordingly is the city which will progress.

Southern Breadstuff Exports.

Every month adds to the wonderful wheat story of the United States in 1897. The latest addition is the report of the exports of breadstuffs in September. In the whole country there was an increase in value for that month from \$17,275,872 in 1896 to \$34,629,946 in 1897, or \$17,354,074—more than 100 per cent. But the figures show another strong point—that the South is maintaining the advantage it gained as an exporter of breadstuffs during the past fiscal year. This appears in the following comparison of such exports for September at eight leading ports:

	1896.	1897.
Baltimore	\$2,583,785	\$6,135,981
Newport News.....	449,697	1,220,611
New Orleans.....	1,175,554	3,672,554
Galveston	656,623	1,780,614
Boston	1,380,113	1,734,470
New York.....	3,681,600	8,577,848
Philadelphia	1,186,479	1,979,311
San Francisco.....	3,152,107	4,128,210

The actual increase at the four Southern ports is \$7,944,151, and at the other four, \$7,019,540. When percentages are considered the tendency of trade is even more marked. The increases at the several ports were: Boston, 25 per cent.; New York, 132; Philadelphia, 66; San Francisco, 30; Baltimore, 137; Newport News, 171; Galveston, 171, and New Orleans, 212 per cent. And the end is not yet.

A Practical Monument.

Representative citizens of Richmond, Va., have determined to endow by subscription a mechanics' institute and technological school in memory of Major Ginter. It is understood that the nucleus of the institution will be the Virginia Mechanics' Institute, in which Major Ginter was deeply interested, and which has done a good work, though upon limited lines. There are public-spirited, far-seeing and wealthy men of Richmond in sufficient number to make a magnificent success of such a project.

There are many reasons why it should succeed. Richmond has every promise of becoming a manufacturing city of greater importance than it now enjoys. A technological school of the highest grade, and such a one alone, should be contemplated, will help to develop manufactures and will grow upon the results of its own endeavors. Major Ginter was opposed to ostentation and devoid of self-exploitation. Hence, his most appropriate monument would be an institution devoted to the benefit of the people of the city of his adoption and of the section with which he cast his lot and which he loved. His was a practical mind. The proposed memorial will enable Richmond to give a practical demonstration of the esteem in which he was held in a manner pre-eminently practical.

The funds necessary to endow the Ginter memorial should be promptly contributed, and the movement should have the moral support of every man

in Richmond, in Virginia, in the South, who realizes what the South is to be industrially.

New York Now Alert.

Two or three months ago the Manufacturers' Record showed by official figures that New York and other Eastern ports had during the past fiscal year not maintained their record as exporters in comparison with Southern ports, particularly those of the Gulf. The causes of this situation were set forth in the effort to convince New York that railroad differentials and British Board of Trade rules were not responsible for it. At that time the New York Journal of Commerce, which is valiant and aggressive in behalf of metropolitan trade interests, criticised the position of the Manufacturers' Record and said:

The Manufacturers' Record is perhaps under the impression that New York is suffering from the competition of the natural advantages and enterprise of certain Southern ports rather than from the differentials.

Since then the Journal of Commerce has been studying the figures and comparisons originally presented in the Manufacturers' Record, and in its issue of October 11 it at least practically acknowledges a share in our impressions, for it says:

In their percentage of increased exports the Gulf ports have exceeded the Atlantic ports, and in actual volume the gain at both Galveston and New Orleans has been greater than at any Atlantic port with the single exception of New York. A careful study of these figures for the last two years affords a lesson full of meaning to all who are directly or indirectly associated with the export trade of the United States. If those engaged in the shipping trade at our Atlantic ports desire to maintain their superiority they must bestir themselves.

We look in vain in this for any reference to differentials or winter load line, but it would not be surprising if New York, now alert, should, after a sufficient lapse of time for cogitation, evolve an explanation of the phenomenon equally absurd as others which it has advanced.

Negroes Studying Themselves

In a letter to the Manufacturers' Record, Dr. R. H. Johnson, of Brunswick, Ga., alluding to his race, writes:

The world has never had a race who had such superior advantages for development as the American negro. To some extent he has made use of them. But amid all this development the negro as a race is degenerating.

He finds in the increase of crime, particularly crime of a particular kind, in spite of the millions of dollars spent in so-called education, evidences of moral degeneracy in the negro death rate compared with that of the white, physical degeneracy, and in a comparison of children of today with those of twenty years ago, intellectual degeneracy.

Such pessimism is a gratifying relief from the insane optimism which has characterized much of the treatment of the negro question in certain quarters. The best way to obtain satisfactory, practical results from the study of the

negro for his betterment is to approach the subject from the point of pessimism. The figures upon which such an investigation must be based will permit of no other method, though, it must be remembered, of course, that the history of the negro during the past thirty years is but a satire upon marked characteristics of the white race.

The ray of hope enters, however, at the lowest point. The negroes are beginning to study themselves. They are going behind the spectacular, behind the manifestations for exhibition purposes only, and are telling the truth about themselves. Tuskegee conferences, under the direction of Booker T. Washington, the truest leader the negro race in this country has ever had, have already exerted a powerful influence in opening the way to such a study. In Georgia next month is to be held a conference of negro educators and farmers of the State. They will discuss these subjects: "The Best Method of Building Character in Youth," "A Better Observance of the Sanitary Laws by the Colored People of Southwest Georgia," "A Greater Distribution of the Colored People Into the Territories, Where the Population Is Less and the Territory More," "The Necessity for Better Practical Education Among Our People," "It Is Said the Negro Has Become Criminally Worse Since 1892; If So, Why?" "The Better Observance of Sunday," "The Necessity of the Colored People Purchasing More Land in Unoccupied Territory in Counties of the State," "The Necessity of Colored Youth Learning More Trades and Becoming Better Acquainted with Skilled Labor." Properly handled, the discussions should have an excellent effect.

But there are individual investigators. One of these is Dr. Johnson himself. He has prepared a pamphlet on the condition of the race, and if the publication as a whole meets the expectations raised by the advance sheets it should exert a great influence for good. Its style is in some respects crude; not sufficient statistics are presented to allow a fair judgment as to their accuracy, but the author is square with reason and truth when he writes:

If all the negro ministers as a whole would live holy and virtuous lives and instruct their congregations to let down their buckets where they are, to regard virtues themselves, to till the soil intelligently (and quit flocking to the cities), buy homes, get property in general, cultivate the brain, we would, as a race, be a great electro-motive force of power in this country today. Let the negro all over the country organize against laziness, immorality, drunkenness, immoral ministers, teachers, physicians and reformers of all kinds, organize against excursions, hot suppers as now conducted, and let us as a race respect the laurels of virtue of all women.

This advice is sound, though it is not applicable to the negro race alone. Negroes should follow, and the whites, in encouraging Dr. Johnson in his loveless task of love, should realize the power of example upon an inferior race.

At the last monthly meeting of the Chamber of Commerce of Raleigh, N.

C., the matter of technical education in cotton manufacturing, as an addition to the Agricultural and Mechanical College of the State, was discussed, and a committee, of which Charles Pearson, a graduate of the college, is a member, was appointed, with instructions to consult and co-operate with the college authorities and endeavor to establish at an early day a textile school.

THE ARMOR-PLATE BOARD

Enthusiastic Over the Resources of Birmingham.

(Special Cor. Manufacturers' Record.)
Birmingham, Ala., October 19.

The movement in iron continues and is limited only by the cars that can be furnished. But it is all on account of old business. New business is very light—it is almost nil. The furnaces are not making any effort for fresh business, but are greatly interested in clearing up old orders and reducing stocks in yards. The present outgo is largely in excess of production, and stocks in furnace yards continue to show a most gratifying decrease. The warrant yards are also being drawn upon at a lively rate, but the prices had for this stock are difficult to obtain. The iron held by this interest is, as a rule, for speculative account, and the sales are generally effected in other markets than this. While exact figures of sales cannot be given, it is current talk that published quotations are frequently shaded when necessary to move the iron. When the speculative interest becomes tired quotations cut no ice in the unloading process. The furnaces, so far as can be learned, are adhering pretty closely to quotations. There is an absence of desire on their part to register any new business of moment for nearby delivery, and they are not keen to register business at prevailing figures for 1898 delivery. The export business is in the same position as the domestic business. The movement out on this account is very gratifying, but it is practically all on account of old business. It will probably be in this condition until yellow fever disappears and the wheels of commerce again revolve free from the interference that accompanies the scourge.

The armor-plate committee, at this writing, are investigating the advantages of this locality in a special train, well stocked with all the essentials to satisfy internal longings and flanked by maps and data that can carry only conviction to the investigating mind as to the adaptability of this location for government purposes. If, with all our advantages, we are not favored, there will be no armor-plate plant in the South.

Officially the armor-plate board is non-committal. Its members are individually enthusiastic over the enormous amount here of elements necessary for making armor plate, and admit that for cheapness of production Birmingham has no rival.

The figures published by the Alabama Car Service Association for the movement of cars in September show that they handled 23,320, as against 20,742 in September, 1896. This gratifying increase—our barometer of business—gave, the first half of the current month, every evidence of a further improvement. But the spread of yellow fever has been so continuous that the element of uncertainty now clouds favorable expectations.

The Howard-Harrison Pipe Co. has inquiries from France, Russia and Birmingham, England, aggregating large amounts.

Operations at the rolling mills continue with full forces, though the business in

finished product is suffering from the spread of the yellow fever. The Avondale Cotton Mills is now under roof, and the advance shipments of the machinery have arrived. The various departments are being laid off and made ready for the placing of the machinery. A visit to the minor industries discovered nothing that prompts special mention. There was some new work that came in at the close of the week from the sugar country. The general miscellaneous work appears to be evenly divided, so that all have a bite at it. There is street talk of a successful effort on the part of the Illinois Central Railroad to effect an entrance here. The purchase by this corporation of coal lands north of us gives some color to the report. The advantages to this place of such a connection are obvious. It would give us a rate of freight to Northwestern points which, because of competition, would always be the minimum, and it would widen our territory for distribution. But the officials as yet have nothing to say and will not make known their plans until they are matured certainties. Several enterprises contemplated are "hung up" because of the prevailing fever. The frost, near due, will tone and brace up the feelings, give confidence to ventures and push to successful practical conclusions what is as yet simply outlined in one's mind. J. M. K.

TO SHOW FLORIDA TOBACCO.

Big Fair to Be Held Next Week at Lake City.

(Special Cor. Manufacturers' Record.)
Lake City, Fla., October 16.

The tobacco-growers of Florida will hold a Tobacco Fair at Lake City, Fla., on Wednesday and Thursday, October 27 and 28, at which will be exhibited all the different varieties of tobacco in all the different stages from the growing plant to the cigar-making. There will also be a display of field and garden products, showing that the tobacco-grower can raise all his own provisions while making his crop. Lake City is situated 212 miles south of Macon, Ga., sixty miles west of Jacksonville, Fla., at the junction of the Georgia Southern & Florida Railway with the Florida Central & Peninsular and Plant system. It is a beautiful little city of 3000 people, and derives its name from the number of lakes in the vicinity. Here are located the Florida State Agricultural College and Experiment Station. It is in the centre of a great cigar tobacco section of America, where are produced fine grades of Cuba and Sumatra tobacco.

Long before the war there was grown in South Georgia and North Florida an excellent quality of cigar tobacco, which, however, never acquired anything more than a local reputation. During the war, and for a number of years after, the culture of this tobacco was almost entirely abandoned. Some fifteen years ago there was a revival of this industry. Seed was imported from the famous Vuelta district of Cuba. It was then discovered that the seed from the plant of the imported seed produced a tobacco equal in texture and flavor to the Cuban tobacco. Since that discovery the growth of this tobacco has gradually increased, and for the past ten years a very large proportion of cigars sold as "Havana" and "Key West" have been made from tobacco grown in this section.

The section in which this tobacco is grown embraces the counties of Columbia, Hamilton, Bradford, Putnam, Madison, Leon and Gadsden in Florida. That the quality of the tobacco raised in this section is equal to that of the imported Cuban, if not superior, is the verdict of experts. In 1888, at the Cincinnati Centennial, Columbia county tobacco was awarded the gold medal for the best cigar wrapper and filler in a competition open to the world.

A few years ago an experienced tobacco-grower from Massachusetts settled at Lake City and engaged in raising tobacco. He paid \$8 per acre for forty acres of land. One acre of his first crop of tobacco netted him \$325, or \$5 more than his entire farm cost. Another planter near Lake City realized a profit of \$1500 from a crop of ten acres.

Within the past three years experiments have been made in the growth of Sumatra tobacco, seed being imported from Sumatra. The experiment has proved a great success, and in a few years the cigar manufacturers of the United States will have no cause to import this grade of tobacco. Sumatra tobacco is used more especially for wrappers, it being very thin and light, and for this reason commands a high price, from \$3 to \$4 per pound. The Sumatra is a luxurious grower, and 1000 pounds to the acre is not an extraordinarily large yield.

Now that the success of Sumatra has been demonstrated and Cuban tobacco is no longer exported, there is no section in the world that offers greater inducements to tobacco-growers than North Florida.

Lake City is situated upon a wide plateau, the central and highest point of the Florida peninsula. The elevation of 210 feet above sea-level exempts the city from malaria and affords perfect drainage. Constant breezes from the Gulf and Atlantic produce a delightful and exhilarating atmosphere the year round. The completion of the Georgia Southern & Florida Railroad, which intersects every railroad system in the State, transformed Lake City from a comparatively unimportant way station into a railroad centre and distributing point. Sixteen trains arrive and depart daily over three lines. Within 100 miles are four competing seaports, all accessible by rail.

Lake City is one of the best sections for general farming in the South. Fruit and vegetables are grown extensively for market. The native range and the cultivated forage plants supply abundant food for stock of all kinds. The county is settled by an industrious and thriving people. The prosperous condition of the farming population is a criterion of the intrinsic value of the lands.

Forests of yellow pine surround the city. There are hardwoods in great abundance and variety. Clay suitable to the manufacture of brick, tile and pottery is found in unlimited quantity. Near the city are large quarries of valuable building stone. Phosphate and marl deposits lie along the railroad.

Steam cotton gins run night and day ginning the cotton produced in the neighborhood, and there are many others throughout the county. The cottonseed is used extensively for fertilizers, and for the manufacture of cottonseed oil, meal, etc. The A. B. Hart Tobacco Co. has recently completed a model packing-house for curing cigar leaf. There are two extensive planing mills and wood-working establishments in constant operation.

A. B. H.

The Spring Garden Wharf & Land Co. of Baltimore, Md., has leased to James B. McNeal & Co., also of Baltimore, a lot 100x200 feet, with improvements, at Wooster and Warner streets, Spring Gardens. The Messrs. McNeal will utilize the property for manufacturing purposes, establishing a large paint factory. The property of the Spring Garden Company is well located for purposes of manufacturing.

SHEEP CULTURE IN AMERICA.

Opportunity for the South to Develop the Wool Industry.

In some sections of our country there are ranches devoted exclusively to the wool industry, but to a very much greater extent farmers and ranchmen wholly neglect sheep husbandry, or follow it in a more or less cursory manner. There are many farmers who make a specialty of thoroughbred stock of fine quality of the different breeds, and in many sections much interest is taken in the improvement of sheep. So much is this the case that Australia, the world's greatest wool-producing country, depends largely on the United States for breeding stock.

But in spite of the precedence we enjoy in this respect, there are hundreds of thousands of farms, scattered over our country, from Maine to California, on which not a single sheep is to be found nor a pound of wool is grown, under the very mistaken idea that "sheep do not pay."

It is possible that where a farm is devoted to some profitable specialty sheep may have no proper place in the farm economy, but in the majority of cases a flock of sheep can be maintained with no material outlay of time, attention or forage, and will yield an increase of young stock of at least its own value each year for net profit, leaving the wool, mutton and by-products as remuneration for feed and attendance.

Sheep will clean up a filthy farm if given the opportunity, and increase the fertility of the soil to such an extent that "the golden hoof of sheep" has become a well-established aphorism. British and Canadian farmers have realized the advantages of sheep husbandry; their sheep and mutton have been famous for quality for many years. The Royal Show, recently held at Manchester, was attended by 217,980 persons, who paid admission fees to the value of \$90,000. The exhibits of sheep were a feature of this show, the competition was brisk, and in many instances the differences in the exhibits were more largely a matter of fancy than one of merit. So generally have the advantages of sheep-raising been appreciated that in the United Kingdom of Great Britain, including Ireland, an area of 120,973 square miles, there were in 1893 31,774,000 sheep, while the United States, with an area of 3,602,999 square miles, had in 1893 47,273,000, and in 1897, 36,818,000 sheep.

South Carolina, a State with practically illimitable territory, eminently adapted to sheep culture, land poorly adapted to agriculture because of its mountainous and hilly nature, could only produce 72,000 sheep in 1896, while if her natural resources were developed in the same degree as some of our other States, she would become as noted for her wool interests as she has for her cotton and naval stores.

At the average American fair, sheep too frequently form only a small portion of an agricultural exhibition, itself, in many cases, relegated to the background for horse-racing, ball-playing, balloon ascensions or other diversions. A strong effort, however, is made in many sections to overcome this tendency; liberal premiums are awarded, certificates of pedigree required, and real merit only is recognized. Fine sheep are becoming more general, and a campaign of education is in progress under the influence of sheep-breeders, registry, live-stock and fair associations.

The outlook for sheep culture in this country is brighter than it has ever been, and American activity will ultimately place our domestic sheep and wool indus-

try generally on a level with that of the very highest practice attained anywhere in this science.

Literary Notes.

Institutes of Economics. By E. Benjamin Andrews. Publishers, Silver, Burdett & Co., Boston.

The president of Brown University, in preparing this work, combined the experience of a thorough student and a practiced teacher. He has, therefore, produced a text-book which will, no doubt, be a model of construction for those in other fields. He realizes that the science of economics is not a fixed one, but a progressive one, but he does not hesitate on that account to attempt a new summary. In this effort he has in mind both the student, who should be allowed to do thinking for himself and who should be saved from confusion, and the instructor, who is to be prompt to fill out the sketch wherever he may deem it necessary. Brevity and clearness are combined in the text, which is further enriched by the use of different styles of type to distinguish the varying importance of the material. Many persons regard economics as a dry, theoretical study. But recent events in this country have demonstrated the necessity for accurate knowledge on the subject with a most practical bent. Dr. Andrews's volume is an illustration of the attractiveness which may be thrown around such a study.

Health of Body and Mind. By Dr. T. W. Topham. Publisher, Book Publishing Department, Brooklyn Daily Eagle, Brooklyn, N. Y.

In this exceedingly practical volume Dr. Topham, starting at the proposition that sickness is a result of the violation of natural laws, elaborates through several chapters in simple language directions for bringing the body and the mind into harmony with nature's laws. Man frequently gives greater heed to the care of a favorite animal than to that of himself or his children. This book points out the dangers of such a policy, and shows the way to escape them. Considerable space is devoted to minute directions for simple exercises in one's room that tend to overcome the tendencies of carelessness. They are fully illustrated by half-tone engravings.

Her Place in the World. By Amanda M. Douglas. Publishers, Lee & Shepard, Boston.

So much fiction of today deals with what may be termed the city side of life that it is a relief to come upon this story by Miss Douglas, which deals with a small country town, and in which the opportunities for the drawing of attractive home-like pictures are fully realized. In developing the career of her heroine Miss Douglas deals in strong characters, in which noble instincts are the most prominent. The book is thus helpful in two ways—as a rest from the lurid literature, which is the food of mental dyspepsias, and as an inspiration for young women who have not yet found their places in the world.

The Rare Coins of America and Foreign Countries. Published by William von Bergen, the Numismatic Bank, Boston.

The eighth edition of this handbook is complete in the information it contains about the rare-coin business. The volume is profusely illustrated and bound in red cloth with gilt edges. At the back are thirty pages of half-tone plates, giving a comprehensive illustration of coins, from the earliest specimens to modern times, with affixed prices at which such coins sell at auction. A person does not have to be a numismatist to find pleasure and instruction in the book.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Future of the Columbia & Maryland.

The Columbia & Maryland Electric road promises to play an important part in railway affairs in the near future. As is well known to readers of the Manufacturers' Record, this line, which was projected between Washington and Baltimore by the Columbia & Maryland Railway Co., is now in the hands of T. Edward Hambleton and James Bond, of Baltimore, receivers. If completed it would form a short route between the cities mentioned, through a section of the country which has but a few grades. Work was begun upon the line several years ago, and the track is now laid between Baltimore and Ellicott City, a distance of about ten miles, also to a point about ten miles east of Washington, leaving a gap between Laurel and Ellicott City, Md. While the road was intended for the use of electric motors, the track is laid with heavy steel rails on hardwood ties, and ballasted with stone, being up to the standard of a modern steam railway. For several weeks past the firm of Steele, Semmes, Cary & Bond, attorneys of Baltimore, have been negotiating with security-holders of the railroad with the view of purchasing their interests. In connection with the negotiations it has been reported that J. Pierpont Morgan & Co., of New York, are desirous of obtaining control of it, and that the firm mentioned has been acting as their agent. For nearly a year the receivers have been endeavoring to adjust the affairs of the company, so as to effect a settlement with creditors and to complete the line. One of the receivers recently informed a representative of the Manufacturers' Record that arrangements had been practically completed for a reorganization and the resumption of work in the near future. The Manufacturers' Record learns that a security-holder of the company is authority for the statement that Messrs. Morgan & Co. are desirous of obtaining stock in the road, but it is considered doubtful whether their control of it will result in its completion.

The electric line is practically parallel to the Baltimore & Ohio between Washington and Baltimore, and touches most of the towns dependent upon the Baltimore & Ohio for transportation facilities. It is generally understood that Morgan & Co. have been at work several months with the view of obtaining control of the Baltimore & Ohio, at least, the portion between Washington and Philadelphia, with the view of reorganizing it and including it in the great system which was outlined in the Manufacturers' Record over a year ago, which is to comprise a chain of roads from the Mississippi river to Jersey City, embracing the Central Railroad of New Jersey, Philadelphia & Reading, the Baltimore & Ohio and the Southern. All of these, except the Baltimore & Ohio, are practically in the hands of Morgan & Co. at present. If this firm can secure control of the electric road, they have a powerful argument to induce the security-holders of the Baltimore & Ohio to accept their proposition, for, if the Columbia & Maryland is completed, it will take away a large amount of traffic of the Baltimore & Ohio, and at the same time give Morgan & Co. a chance to complete their system, at least as far as Baltimore, by connecting the Columbia & Maryland with the Southern by a bridge across the Potomac river. Those who are best informed on the subject believe that it will

be only a question of a short time before the New York firm will obtain control of the Columbia & Maryland, as it is said that many of its security-holders are willing to sell out for a comparatively small sum.

Charleston's City Railway.

[Special Cor. Manufacturers' Record.]

Charleston, being the last city of any importance in the United States to abolish its horse cars and adopt the electric system of rapid transit, the builders of the trolley lines here took advantage of others' experience and built a system that is without exception the best constructed and equipped line in the United States. This is a strong statement, but I believe that a careful inspection of the lines and plant will bear me out in the assertion.

The Charleston City Railway Co. was granted a charter on December 14, 1896, Mr. P. H. Gadsden being the president of the company. Immediately after the charter was granted work was begun, and was pushed through to completion. Shortly after the new company was organized it commenced negotiations for the purpose of purchasing the old horse-car lines, which was accomplished with little trouble, putting all the street-railway lines under one management. The construction of the track is of the best character. The rails are of steel, of the grooved variety, sixty feet in length and weigh about sixty-five pounds to the yard. They are laid on ties of the best quality, and the track is of standard gauge. The rails are connected by the latest and most improved system of electric connections, and the smallest details were watched so as to get the best results. The company has about twenty miles of track, taking in the more important streets of the city, and a line of seven miles to a new park recently opened.

The power-house and car shed is built of brick, and combines all the most modern improvements. It is 68x85 feet, and the car shed is 255x68 feet. The company has an abundance of electrical power. Besides having sufficient power to run all its cars, there is sufficient latent power to light the entire city. All the machinery is of the very best that is to be had, the dynamos being of the beltless variety, connected direct to the engines. The plant complete cost in the neighborhood of \$600,000. G.

A Texas Project.

Mr. C. D. Simpson, of Scranton, Pa., president of the New Mexico Railway & Coal Co., confirms the report recently published in the "Construction" columns of the Manufacturers' Record that this company intends building a railroad line between El Paso, Texas, and the coal-fields near White Oaks, New Mexico. Such a line has been contemplated for several years, and the company referred to has been formed for this purpose. Mr. Simpson states that it is intended to begin construction work within a month, when permanent surveys, now being made of the right of way, will be completed. It is understood that a number of Pennsylvania coal operators are interested in the enterprise.

Among the directors are: C. D. Simpson, president; Chas. B. Eddy, of Eddy, New Mexico, vice-president; B. S. Harmon, of New York, secretary, and J. W. Hollenback, Wilkesbarre, Pa. The headquarters of the company is at No. 66 Broadway, New York.

Railroads in Alabama.

Mr. Ross Smith, associate railroad commissioner of Alabama, has contributed an interesting article to the handbook of that State upon its railroad

progress. According to Mr. Smith's statement, while Alabama was one of the first three States to begin the building of railroads in 1845, the era of its development in this respect did not begin until after the war. At the time the article was written the State had 3625 miles in active operation, giving employment to about 14,000 men and representing a valuation of \$45,500,000. According to the article, only two counties out of sixty-six are not touched by railroad lines being built or operated. Among the roads now under construction are a branch of the Mobile & Ohio from Columbus, Miss., to Montgomery, Ala., a branch of the Plant system between Newton and Elba, all within the borders of the State, and twenty-eight miles of the Mobile, Jackson & Kansas City line. The commissioner also states that the Montgomery, Hayneville & Camden Railroad will probably be built at an early date, while charters have been granted to several other companies.

From Atlanta to Selma.

A report from Selma, Ala., is to the effect that the Atlanta & Alabama Railroad project has reached a point where the entire contract for building this line has been given to the Erie Construction Co. It will sublet the grading and other contracts. This road, which has already been described in the Manufacturers' Record, will form a shorter route between Atlanta and Selma than any now existing, being 190 miles long, and has been promoted by a company of which R. M. Mitchell, of Atlanta, is president, and W. H. Tisdale, of Selma, vice-president. It is reported that a number of Northern capitalists have become interested in the scheme. Right of way has been secured, and stock subscriptions to the extent of over \$300,000 pledged in support of the enterprise. It is intended eventually to extend the road to New Orleans, when it will be an important link in forming another system between the Potomac river and the Gulf of Mexico which will be shorter than any now in operation. If the road is completed to New Orleans it would give the Seaboard Air Line and other companies terminating at Atlanta a shorter route to the Gulf city.

Railroad Annual Meetings.

The annual meeting of the Southern Railway stockholders resulted in the election of the following directors: Alexander B. Andrews, Raleigh, N. C.; Joseph Bryan, Richmond, Va.; Charles H. Coster, Samuel Spencer, Harris C. Fabnestock, Robert M. Gallaway, of New York; William W. Finley, Washington, D. C.; Samuel M. Inman, Atlanta, Ga.; Skipwith Wilmer, Baltimore.

At the annual meeting of the Chesapeake & Ohio Company the following directors were elected: W. P. Anderson, Westerly, R. I.; George T. Bliss, C. H. Coster, Chauncey M. Depew, Charles D. Dickey, Jr., Samuel Spencer, New York; M. E. Ingalls, Cincinnati; Decatur Axtell, Henry Wickham, Richmond.

Interstate Commission's Report.

The statistical report of the interstate commerce commission for the year ending June 30, 1896, has been made public. According to the report, the total railroad mileage was 182,776, an increase of 2119, a Southern State, Georgia, making the most favorable showing, 233 miles. The number of railroad employees was 826,620, and they received 60 per cent. of the total amount paid in operating the lines. According to the report, the average capital per mile was \$59,610, exclusive of current liabilities. There were 4,000,000 more passengers

carried during the year than during the previous year.

An Important North Carolina Line.

According to a dispatch from Winston, N. C., the Southern Railway Co. has decided to build its proposed extension to what is known as the North Carolina Midland Railroad between Mocksville and Mooresville. The extension will be about twenty-seven miles long, and will give the Southern a much shorter route from Winston to Charlotte, N. C. It will be a valuable addition to the system, as it will enable the company to shorten its time considerably between the places mentioned and place them in closer communication with each other.

Chattanooga Southern Improvements

According to a dispatch from Chattanooga, Tenn., the Chattanooga Southern Railroad Co. has decided to give the road a thorough overhauling. This will include improvements in its shops and repairs to its rolling stock and roadbed. It is stated that arrangements are being made to extend the road from its southern terminus, Gadsden, Ala., to Birmingham, which was the intention of the former owners of the line. W. S. Hoskins is general manager of the company.

Railroad Notes.

G. L. Files has been appointed commercial agent of the International & Great Northern Railroad Co., with headquarters at Dallas, Texas.

The Atlanta, Knoxville & Northern Railroad Co. has transferred the office of the superintendent and chief train dispatcher to Blue Ridge, Ga.

Mr. R. B. Baer, of Houston, Texas, has been appointed receiver for the Galveston City Railroad Co. on the application of the Guaranty Trust Co. of New York.

A. J. Frazer has been appointed superintendent of the Pittsburg and Wheeling divisions of the Baltimore & Ohio. Mr. Frazer has been acting as division superintendent of the Southern Railway Co.

The shipments of cattle from Norfolk and Newport News are steadily on the increase. Recently two vessels of the Chesapeake & Ohio Steamship Line carried over 700 head, bound for Liverpool and London.

At the annual meeting of the Norfolk & Western Railroad directors, Mr. Henry Fink was re-elected president; W. C. Bullitt, elected vice-president and traffic manager, and J. M. Barr, vice-president and general manager.

The result of the annual meeting of the Central of Georgia Railway Co. was the re-election of the present officers, including President H. M. Comer. Mr. G. Gunby Jordan, of Columbus, was elected director in place of G. N. Williams, deceased.

According to the report of the Alabama Car Service Association, of Birmingham, the total number of cars handled by this association during the first eight months of the year were 161,480, an increase of 3886 over the corresponding period of 1896.

The South Carolina & Georgia Railroad Co. has made arrangements to export another cargo of grain from Charleston. This will make four cargoes which have been arranged for within the last thirty days. The steamship Dalmatia is due in Charleston to load grain for Europe.

The Richmond, Nicholasville, Irvine & Beattyville Railroad has been sold by order of the court to parties who represent indebtedness of the road. The price paid was \$301,000. The railroad has

been operated by John McLeod, of Louisville, as receiver for several years, and extends between Versailles and Irvine, a distance of sixty-one miles.

According to the annual report of the South Carolina & Georgia Railroad Co., filed with the State railroad commission of South Carolina, the gross earnings were \$1,189,318.66, and the income from operation \$438,800.34. After deducting all expenses, including interest and taxes, there was a net income of \$112,207, which, added to last year's surplus, makes the amount this year \$177,852.

The Railroad Gazette has begun a series of articles relative to improvements on the Baltimore & Ohio Railroad system made since Receivers Cowen and Murray assumed charge. The first article, which dwells upon the terminals at Baltimore, is very exhaustive, and is illustrated by diagrams, etc. It contains figures which have been from time to time published in the Manufacturers' Record in statements from the receivers.

COAST COUNTRY RICHES.

Houston Preparing to Make a Great Display of Them.

[Special Cor. Manufacturers' Record.]
Houston, Texas, October 18.

The Texas Fruit, Flower and Vegetable Festival will occur in Houston December 6 to 11, inclusive. Behind this enterprise is an official board and directory, who have not found the word "fail" in their dictionary, and dismay does not occur in their vocabulary. It is the intention to make the entertainment attractive as a drawing card, but above and beyond that it is desired that the results be of practical and lasting benefit to Texas as a State, and particularly to the coast country, which can produce fruits, flowers and vegetables in mid-winter equal to any section of the temperate zone. We intend to supply Northern markets at a time when these products will bring top prices.

The gardeners and fruit-growers, as well as the farmers of South Texas, are urging the Houston Business League to secure the location of a factory which will produce tile for under-drainage. They promise such an industry an instantaneous and substantial support. The large list of Houston subscribers to the Manufacturers' Record are pleased at the assistance this publication is taking in helping along the good cause.

The Dickson Car Wheel Works recently increased its capacity to 100 wheels daily, but still it is behind in delivering orders. Major Dickson said recently to your correspondent: "We have no cause for complaint; in fact, we have every reason to feel gratified at our splendid business."

Among recently-located industries the Houston Packing Co. and flour mills are both meeting with success.

A contemplated shoe factory to employ 125 operatives is still under serious consideration, while a clothing factory on a small but progressive basis is an assured fact.

Favorable reports from Washington relative to the improvement of Buffalo bayou have been received here. It can be set down as a fact that the people of Texas will never be satisfied until commerce is given a highway to the sea from its chief railroad centre.

The Virginia board of agriculture will issue a statement explaining the favorable results of experiments with beet-sugar growing in Virginia.

In 1879 property returned by negro taxpayers in Georgia was valued at \$5,182,398; in 1897 it amounts to \$13,619,690.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

ENGLISH COTTON MILLS.

Lancashire Capital May Be Diverted to the South.

A recent issue of the London Times published the following communication from its Manchester correspondent:

"The capital invested in the cotton industry of the north of England is estimated at £60,000,000. Taken as a whole, it has been losing money for some uncertain length of time. The executive of the Master Spinners' Federation declares that the position of the Lancashire cotton trade as a whole was never so ruinous to employers as now, nor the prospect so discouraging. The history of the trade, they say, may be searched in vain for an adequate parallel of misfortune. The cotton famine of thirty-five years back was an appalling experience for the wage-earners, for their families, and for all in any way dependent on them for the means of living; it was a disastrous time for capital as well as for labor; but when the famine came to an end, alleviated as it had been in some respects by the charity of the whole kingdom, there was at least the consolation that Lancashire supremacy in the world of cotton remained a fact, and the trade could resume its course of expansion when the material for manufacture was again attainable. Now the case is changed altogether. English cotton traders find more and more that the foreign consumer of their production is, however willing to buy as of old, barred from doing so by protective tariffs in the interest of his neighbors and compatriots. Contrary to British example, the foreigner lets himself be taxed by the mill-owners at his own gates, the cheaper product of English mills is sealed from him, and while foreign prices are thus upheld England finds rivals in place of customers. These, of course, are generalities, and to generalities there are exceptions. England may, for the time being, do a roaring business in the machinery exports that are so necessary to the foreigner's enterprise. Week by week these exports, it has been said, equip a new weaving or spinning mill somewhere abroad with the best appliances for competition with the cotton industry at home.

"It is less material to inquire how long this process may have been going on at its present rate than to contemplate its future effects. Capital, however otherwise non-angelic, is credited with having freer wings than labor. Unless we are to dismiss as mere romance the prevalent impression of our cotton traders that theirs is the industry that caps all in the world for the means of living it distributes among some half-million of wage-earners of different grades and orders, the perpetuation of this great instrument of their subsistence unimpaired would seem to be one of the paramount interests of labor and its leaders. And so, no doubt, they regard it. But labor in the cotton trade seems wholly in disagreement with capital as to the remedy that bad trade requires. What is more to the point, organized labor, as represented by its trade unions, grows stronger year by

year, and more formidable if not irresistible for the imposition of its own will in the councils of such partnership as may exist in the interests of employers and employed. Without entering further at the moment into the consideration of the issues raised in Lancashire by the announcements of federated action of master spinners and manufacturers for the enforcement of wage reduction, it is safe to say that there are two dominant questions, at this stage of the movement, which overtop the rest in immediate practical significance. First, on the part of the operatives, taking the whole half-million or so in bulk, and disregarding any sectional difference in circumstances as between weavers, spinners, carders and all the rest, will this newly announced federation of masters prove to be anything more cohesive and unanimous, anything less like a rope of sand, than previous inadequate combinations for a similar purpose? Secondly, on the part of the employers. If we are able to show, for the first time, and convincingly to the operative mind itself, that we are, this once at least, united an resolute throughout our ranks, will the wage-earners and their leaders hold nevertheless to their usual conviction that they know best what the necessities of our trade require, and risk its existence, the starvation of themselves and the further impoverishment of the poor all round by throwing up work altogether?"

Could there be drawn a more effective statement than the above of the conditions to which the Lancashire cotton manufacturers have been brought by the competition of foreign nations with them in the world's markets for the products of the cotton spindle and the loom? The prospect for the capital of \$300,000,000 invested in the Lancashire cotton-spinning interest was "never so discouraging," nor, "in the history of the trade," is there an adequate parallel of misfortune. The only remedy for this, says the same correspondent, is "an enforced reduction of 10 per cent. in the weavers' wages."

The present wage rates for spinners and weavers in the Lancashire mills are far below the lowest paid in this country, and keep their employes down almost to the starvation point. A reduction of 10 or even 5 per cent. would make the living of the tens of thousands employed in those mills unendurable.

Another feature of the dilemma in which the "Master Spinners' Confederation" has been placed is frankly stated. Once they had "the consolation that Lancashire supremacy in the world of cotton remained a fact, and the trade could resume its course of expansion when the material for manufacture was again attainable. Now the case is changed altogether. English cotton traders find more and more that the foreign commerce of their production is, however willing they are to buy as of old, barred to do so by protective tariffs in the interests of his neighbors and compatriots. Contrary to British example, the foreigner lets himself be taxed by the millionaires at his own gates, the cheaper product of English mills is sealed from him, and while foreign prices are thus upheld England finds rivals in place of customers." At present British manufacturers of spinning and weaving machinery are doing "a roaring business in machinery exports." But "week by week these exports equip a new weaving or spinning mill somewhere abroad with the best appliances for competition with the cotton industry at home."

These are facts. They are of infinite importance to the South if rightly considered and acted upon. New England mills are already investing large capital

in Southern cotton mills, and will do more so as time goes on. Bring these facts before the Lancashire Master Spinners' Association. Show its members how the \$300,000,000 which they have invested can be transferred to the cotton States of America and give them a chance to enter once more into the world's competition, and many of them will doubtless make the transfer of their business to the South before it is too late.

The Cotton Crop.

The government crop report for October gives the following estimates of cotton: "The cotton returns indicate an average condition on October 1 of 70, as compared with 78.3 on September 1, 60.7 on October 1, 1896, and an October average of 74.5 for the last ten years. The present average is the lowest October average since 1883, with the exception of the last two years, 1895 and 1896. There has been a further decline, more or less marked, in every cotton-producing State, the decline in North Carolina being 17 points, in Tennessee 12 points, in South Carolina, Georgia, Florida and Arkansas 10, in Indian Territory 8, in Alabama, Mississippi and Missouri 7, in Louisiana and Texas 6 and in Oklahoma 5 points. The average conditions, by States, are as follows: Virginia, 70; North Carolina, 78; South Carolina, 74; Georgia, 70; Florida, 76; Alabama, 73; Mississippi, 74; Louisiana, 72; Texas, 64; Arkansas, 67; Tennessee, 65; Missouri, 74; Oklahoma, 90; Indian Territory, 85." Col. A. B. Shepperson, of New York, is quoted as regarding this report "as extremely misleading, inasmuch as it will cause a great many people here and in Europe to look for a larger crop than may be realized."

North Carolina Mills.

According to the report of the State labor commissioner, there are in forty-eight counties of North Carolina 24,261 looms in operation and 1,616,247 spindles. There are twenty-five hosiery mills and two dyeing and finishing mills. The mills employ 26,787 persons. The average wages paid skilled male operatives (exclusive of machinists, engineers, firemen and superintendents) are \$1.11 per day, for unskilled sixty-six and a-quarter cents, skilled women sixty-seven cents, unskilled forty-six cents, children thirty-four cents, the general average being sixty-five cents a day for 1897, against sixty-two cents for 1896. Of the mills reporting 9% per cent. report an increase in wages, 4% per cent. a decrease and the remainder no change; 54 per cent. charge employees house rent, while 46 per cent. make no charge. The hours of labor average eleven and a-half. The mills were in operation on an average last year 288 days.

Textile Notes.

The Columbia State is rejoicing in the fact that South Carolina operated last year more spindles than any other State in the South.

Mr. J. H. Kennedy, of Columbus, Ga., has made a proposition for the erection of a 2000-spindle cotton mill at Madison, Ga. The offer was made through the Bank of Madison.

The Cedartown Cotton Manufacturing Co., of Cedartown, Ga., will, instead of erecting the new 7500-spindle mill lately noted, treble its present plant. Present mill now has 4000 spindles in operation.

Mr. Edmund Dwight, treasurer of the Stark Mills, of Manchester, N. H., states that at the annual meeting of the company last week it was decided to indefinitely postpone the building of a branch mill in the South. There is, therefore, no probability that the Stark Mills will build a mill in the South at present.

It is announced that thirty or forty members of the Southern Textile Association will attend the meeting next week in Philadelphia of the New England Cotton Manufacturers' Association.

Col. J. L. Whatley, of Savannah, Ga., has received a letter from Mr. Hale, of New York, offering to build a \$300,000 cotton mill in Savannah. Mr. Hale proposes that a stock company be formed, and that Savannah investors take \$100,000 of the stock. Mr. B. H. Levy and Colonel Whatley will endeavor to have this enterprise materialized.

Mr. Ellison, the cotton expert of Liverpool, estimates that Europe and the United States will require in 1897-98 for consumption 11,070,000 bales of 485.1 pounds average weight, making 10,740,000 bales of 500 pounds each, against 10,877,000 bales of 483.2 pounds average weight, equaling 10,512,000 bales of 500 pounds each in 1896-97.

The Messrs. Cawthon and associates, who recently purchased the Matthews Cotton Mills at Selma, Ala., for \$70,200, intend to make some decided improvements to the plant. The new owners expect that the mill will cost them fully \$100,000 by the time it is ready for operation, as they will overhaul it and add considerable new machinery. Dr. O. F. Cawthon is one of the new owners, and is an experienced cotton manufacturer, being president of the Stonewall Mills at Stonewall, Miss., where he can be addressed.

SALE OF WEST VIRGINIA LANDS.

Confirmation of a Transaction Involving 300,000 Acres.

Several weeks ago the Manufacturers' Record referred to a report that a Northern syndicate which included Cornelius Vanderbilt, H. McKay Twombly and W. Seward Webb had secured a tract of 300,000 acres of timber and coal lands in the eastern section of West Virginia, paying \$520,000 for it. It was also stated that the same syndicate had obtained control of the Dry Fork Railroad line, which is now in operation thirty-one miles at the head of Greenbrier valley, between Hendricks and Horton. The road has been operated by a Philadelphia company, of which K. F. Whitmer is president. It is understood that the purchasers intend extending the railroad to a connection with the Chesapeake & Ohio at White Sulphur Springs, W. Va., through the tract of land referred to.

In a letter to the Manufacturers' Record, Mr. John T. McGraw, of Grafton, W. Va., who has been acting as representative of the owners of the property, confirms the report of its sale. The transaction is one of the largest of Southern lands which has ever been recorded, and indicates the interest which the resources of West Virginia are attracting among Northern capitalists. The Chesapeake & Ohio Railroad is now a Vanderbilt property, and the railroad which is to be built will be in all about 110 miles in length, and will be a direct connection of the West Virginia Central & Pittsburg system and the Chesapeake & Ohio. In last week's issue of the Manufacturers' Record it was stated that work on this line had begun.

The plan to continue the Nashville Exposition a month beyond the allotted time has been abandoned. The directors have decided to close on October 30, according to programme.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., October 19.

The market has not improved with regard to prices, but the decline noted in our last induced shippers to purchase freely, and, in addition to the regular sales, 5000 barrels of summer yellow were sold at 23 to 23½ cents at this point, together with an equal amount in the South. It would appear as if the decline had come to a halt, present prices being accepted as an export basis. Considerable enquiries prevail for off yellow oil, and while 23 cents is now asked, earlier in the week lots aggregating 1000 barrels were sold at 23½ cents. Receipts have been much less than is customary at this time, the cause being due to yellow fever quarantines, proving decidedly inconvenient to those who have stipulated to deliver goods at a fixed date. Lard shows improvement, 4.55 cents being quoted for January delivery, Chicago, the circumstance, it is believed, proving a strong inducement for packers to purchase cotton oil more freely. Tallow is dull and weak at 3½ cents, the tendency of the market being downward. At least one advantage is apparent, due to the declining oil market, seed values having correspondingly reduced by the planters. Under this circumstance it would appear that the present is a most opportune time for the mills to lay in ample supplies in anticipation of the expected bull markets. Exports for the week aggregate 12,750 barrels, of which 10,000 were consigned to France, the balance chiefly to Holland and England. Receipts were 5220 barrels, but, with increased transportation facilities by rail and water as the yellow fever scare diminishes, heavier arrivals are expected during the forthcoming week. The following are closing prices: Prime summer white, 25 to 26 cents; butter oil, 24 to 26 cents; prime summer yellow, 23 to 23½ cents; off summer yellow, 22½ to 23 cents; prime crude, 19 to 20 cents; off crude, 18 to 19 cents; prime crude, loose, 14½ to 14¾ cents, and soap stock, ½c. per pound. With regard to crude, sales are reported of twenty-four tanks at 15½ to 16 cents, Atlantic, and 14½ to 15 cents, Texas points. Briefly, the market may be considered to be in a better position than a week ago, with regard to the outlook, healthier trade conditions being evident on all sides.

Cake and Meal.—Exports have been seriously interfered with owing to quarantine regulations. No change in the general condition of the market, domestic or foreign, has occurred.

Cottonseed-Oil Notes.

The cottonseed-oil mill at Kennett, Mo., recently built by the Roberts Cotton Oil Co., of Chattanooga, Tenn., has been successfully placed in operation. The capacity of the mill is about sixty tons a day, and is a model plant, being equipped with the most improved machinery.

The market for cottonseed products in New Orleans has ruled quiet and steady during the past week, with no material change in values. Receivers' prices are quoted as follows: Cottonseed, \$8 per ton (2000 pounds) delivered to the mills; cottonseed meal jobbing at the depot, \$18.50 to \$18.75 per short ton, and \$20.25 to \$20.50 per long ton for export f. o. b.; cottonseed oil, 19½ to 20 cents per gallon

for strictly prime crude; in bulk, 17 to 17½ cents, and 23½ cents for refined oil at wholesale or for shipment; oilcake, \$20.20 to \$20.50 per long ton f. o. b.; linters—A, 3¾ cents per pound; B, 3¾ cents; C, 2¾ to 3 cents; hulls delivered at 10 to 15 cents per 100 pounds, according to location of the mills.

Cottonseed products in Texas during the past week have shown a weak and declining tendency. Cake and meal are lower, with the foreign demand light. There is little or no export demand for cottonseed oil, and crude is now selling in the Houston market at 14½ cents, and prime refined at 17 to 18 cents. The Houston Post, in its review of the market for cottonseed products, says: "Prices for all cottonseed products have shown a downward tendency during the past week, and indications point to a further decline. The demand for cake and meal from abroad has remained very small, and exporters have not been able to draw bids at anywhere near previous figures, if any at all. England and the Continent have had large arrivals of new stuff, and the Mississippi valley, as well as the Atlantic States, are now bidding for foreign orders, too." On the 20th inst. the Houston market closed weak at the decline with demand limited. Prime crude oil, loose, quoted at 14½ to 15 cents, and prime summer yellow oil 17 to 18 cents; prime cottonseed meal and cake, \$13 to \$13.50 per short ton, and linters, per pound, 2¾ to 2½ cents, all f. o. b. mill Texas interior points, according to location.

Activity at Harmony Grove.

[Special Cor. Manufacturers' Record.]

Harmony Grove, Ga., October 16.

Parties are negotiating for the purchase of the Hurricane Shoals, a fine water-power on the Oconee river about four miles from this place, with the view to erecting another cotton factory.

W. T. Harber & Bro. are building a large stone cotton warehouse. This will be the third one in Harmony Grove.

The Hood Machine Works is now putting up engines and selling them direct from the foundry.

The Harmony Grove Mills is building another story to its brick warehouse. The directors of the mill are buying enough cotton to last them for several months.

There is very little complaint of "hard times" in this section. Trade in every line is looking up.

Proposed Beet-Sugar Factory.

According to a dispatch from Richmond, Va., Mr. J. B. Pace, of that city, has offered to erect a factory for the manufacture of beet sugar if certain conditions are complied with. As readers of the Manufacturers' Record will remember, beets raised on the State farm near Richmond have had a very large percentage of saccharine matter. The State board of agriculture is encouraging the cultivation of sugar beets.

A Large Contract.

A dispatch from Newport News, Va., announces that the Newport News Shipbuilding & Dry-Dock Co. has secured the contract to repair the vessels of the International Navigation Co. As is well known, this company operates a number of large steamships on the Atlantic, including the Paris, St. Louis, St. Paul and New York. It is stated that the contracts aggregate over \$200,000.

If you are thinking of enlarging your mill, factory or mine, or of purchasing machinery of any kind, send us a postal card giving the character of the machinery needed.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., October 21.

In the local phosphate market there is very little doing, and, in sympathy with the quiet tone for other fertilizer ingredients, the volume of business shows no improvement. From points of production the advices are unchanged, and the demand, both domestic and foreign, for phosphate rock is limited. In South Carolina shipments to domestic ports are improving, and the market is nominally steady with no change in values. The development in the Florida phosphate belt is being conducted with considerable vigor and activity, and shipments from the ports for the current month will be about an average. The demand at the moment for both pebble and land rock is good, and several companies will make some heavy shipments this month. Prices continue firm, especially for pebble rock, and stocks are not allowed to accumulate, but are generally sold when mined. In the local market there are no charters to load phosphate reported. Business during the week in New York has been dull, and no phosphate vessels are reported taken.

Fertilizer Ingredients.

The market for ammoniates is quiet, with the demand at the moment light from all sources. Manufacturers are for the moment well supplied under late purchases, and Southern and Eastern buyers are out of the market. Stocks in the West are ample for all requirements, and holders are generally firm in their views and ask outside figures. For all material prices are not subject to any change, but are steady at present quotations. Nitrate of soda is a shade easier, with free offerings for future delivery.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).	\$2 20 @	—
Nitrate of soda.	1 77 1/2 @	—
Blood.	2 20 @	—
Hoof meal.	1 95 @	—
Azotine (beef).	1 95 @	—
Azotine (pork).	1 90 @	—
Tankage (concentrated).	1 90 @	—
Tankage (9 and 20).	1 85 @	10
Tankage (7 and 30).	17 00 @	18 00
Fish (dry).	19 00 @	—
Fish (acid).	12 00 @	—

Phosphate and Fertilizer Notes.

The British steamship Huron cleared last week from Savannah, Ga., with 1497 tons of phosphate rock and other cargo for Genoa, Italy.

The managers of the Joint Traffic Association at a recent meeting in New York made a rate of \$4.10 per gross ton on phosphate rock from Mt. Pleasant, Tenn., to Baltimore and Baltimore points.

Cable advices were received in New York last week from the west coast of South America stating that the Salar del Carmen, an independent nitrate factory, had just commenced operations, and that as a result the combination was virtually at an end. Lower prices are anticipated as a result of the break.

Mr. Charles W. Davis, of Augusta, Ga., who owns some valuable kaolin territory near Aiken Junction, on the South Carolina & Georgia Railroad, is said to be organizing a company to develop the beds. The company will be known as the Mutual Mining & Manufacturing Co., with general offices in Augusta.

Articles of incorporation were filed last week at Winston, N. C., for the organization of the Southern Chemical Co., which will operate a large fertilizer factory in that city. The capital stock is to be \$100,000, with the privilege of increasing it to \$500,000, over \$75,000 hav-

ing been subscribed. The incorporators are Dr. H. B. Battle, P. H. Hanes and W. T. Brown, of Winston, and F. H. Fries, of Salem.

The following shipments of phosphate rock were reported last week from Charleston, S. C.: Schooner H. & J. Blenderman, for Baltimore with 700 tons, and schooner Isaac T. Campbell, for Weymouth, Mass., with 810 tons. The total domestic shipments from Charleston since September 1 amount to 7321 tons, against 10,315 tons last year.

It is stated that receipts from royalty on phosphate rock by the State treasurer of South Carolina for the nine months of the present year were as follows: January, \$10,397; February, \$1229; March, \$5498; April, \$6599.50; May, \$1375; June, \$2388.50; July, \$7400; August, \$1700; September, \$2599. This shows a total of \$39,186, or an average per month of \$4354. The amounts received for nine months from the several operators in royalty are as follows: Beaufort Phosphate Co., \$8926.50; Coosaw, \$18,567.50; Farmers' Mining Co., \$10,752, and James Reid, \$1300.

Advantages Over Chicago.

In a recent interview President E. St. John, of the Seaboard Air Line, is quoted as making this prediction relative to Norfolk and its suburbs:

"When I went to Chicago it was a city of only 120,000 population. When I left it the population exceeded 1,000,000. If Chicago's natural advantages had equalled those of this community—by which I mean the territory embraced in Norfolk, Portsmouth and Berkley—her population would today largely exceed 2,000,000. The success of any modern city as an industrial centre depends quite as much upon the character of its citizens as upon its natural advantages. Nothing can prevent this community rapidly developing into the seat of a mighty commerce save its own people, and so great are its natural resources that even they cannot retard its growth long. The only question is whether the present generation will reap for itself the rich rewards which will follow the city's early development, or will leave the work and the reward for a future generation."

Atlanta's 800-Barrel Flour Mill.

Arrangements are now being made for the commencement of work on the big flour mill at Atlanta, Ga., reported last week in these columns. Strictly speaking, the Sweetwater Milling Co., of Sweetwater, Tenn., will not build the plant, as had been stated, but instead parties interested in that company will form a separate corporation, and application for charter for same has already been filed. The capital stock is \$120,000, paid in, with privilege of increasing to \$500,000, and the incorporators are Messrs. John B. Whitman and John L. Hutcheson, of Sweetwater, Tenn., and W. F. Hutcheson and S. H. Campbell, of Chattanooga, Tenn.

A site has been chosen and the company will erect at once a building six stories high, 50x80 feet in size, and equip it with the latest improved milling machinery for the production of 800 barrels of flour and 3000 bushels of meal daily. In addition to mill proper, a 100,000-bushel capacity warehouse will also be erected.

The Board of Trade of Jacksonville, Fla., has adopted resolutions favoring the creation of a Department of Commerce and Industry, and has decided to appoint a committee to act in co-operation with other committees to agitate the matter at the next session of Congress.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., October 21.

There has been only a limited volume of business reported in the local lumber market during the past week. Receipts of yellow pine have been lighter than usual, but there is no urgent demand at the moment, and stocks are fully ample for all requirements. Air-dried yellow-pine lumber is about steady as to value, and during the week there has been some business in that line with yardmen and planing mills. The demand for kiln-dried North Carolina pine is fair, and from out-of-town buyers there is a good inquiry. Several manufacturers are receiving some good orders for the most desirable grades of kiln-dried yellow pine from Great Britain and the Continent. White pine is also looking up, and prices are firm, with a better demand. In hardwoods the local trade continues fairly active, with some demand from out of town. The export trade continues light and shows no improvement.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE	
5-4x10 No. 2, kiln dried.	\$12 50 @ 13 50
5-4x12 No. 2, kiln dried.	14 00 @ 15 00
4-4x10 No. 1, kiln dried.	15 00 @ 15 50
4-4x12 No. 1, kiln dried.	15 00 @ 16 00
4-4 narrow edge, No. 1, kiln dried.	12 50 @ 14 00
4-4 wide edge, No. 1, kiln dried.	12 50 @ 13 50
6-4x10 & 12, No. 1, kiln dried.	23 00 @ 24 00
4-4 No. 1 edge floor, air dried.	12 50 @ 13 50
4-4 No. 2 edge floor, air dried.	10 00 @ 11 00
4-4 No. 1 12-in. stock, air dried.	15 00 @ 16 00
4-4 No. 2 12-in. stock.	12 50 @ 13 50
4-4 edge box or rough wide.	8 00 @ 8 50
4-4 edge box do. (ord. widths).	7 00 @ 7 50
4-4 12-in. rough.	9 00 @ 9 50
1/2 narrow edge.	5 50 @ 6 50
1/2 wide.	6 50 @ 7 50
1/2 x 9 1/2 and 10 1/2-in.	7 50 @ 8 50
Small joists, 2 1/2-12, 14 and 16 long.	7 50 @ 8 50
Large joists, 3-16 long and up.	8 00 @ 9 00
Scantling, 2x3, 2x4 and 3x4.	7 00 @ 8 00

WHITE PINE.	
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4.	\$47 00 @ 48 00
3d clear, 4-4, 5-4, 6-4 and 8-4.	42 00 @ 43 00
Good edge culls.	14 50 @ 15 50
Good stock.	16 50 @ 17 50

CYPRESS.	
4-4x6, No. 1.	\$19 50 @ 20 50
4-4x8, No. 2.	13 50 @ 14 50
4-4x8, 16 feet, fencing.	10 00 @ 11 00
4-4x8, rough.	8 50 @ 9 00
4-4 rough edge.	8 00 @ 8 50
4-4 edge, No. 1.	16 00 @ 17 00
4-4 edge, No. 2.	12 00 @ 13 00
Gulf, 4-4, Nos. 1 and 2.	25 00 @ 29 50
Gulf, 6-4, Nos. 1 and 2.	28 00 @ 30 00

HARDWOODS—WALNUT.	
5-8, Nos. 1 and 2.	\$35 00 @ 75 00
4-4, Nos. 1 and 2.	80 00 @ 90 00
5-4, 6-4 and 8-4.	85 00 @ 95 00
Newell stuff, clear of heart.	85 00 @ 100 00
Culls.	20 00 @ 30 00

OAK.	
Cabinet, white and red, Southern, plain-sawn and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.	\$30 00 @ 34 00
Quartered white, Western, 6 inches and up wide, 4-4.	53 00 @ 55 00
Culls.	10 00 @ 15 00

POPLAR.	
Nos. 1 and 2, 5-8.	\$24 50 @ 25 50
Nos. 1 and 2, 4-4.	28 00 @ 30 00
Nos. 1 and 2, 6 and 8-4.	32 50 @ 33 50
Culls.	11 50 @ 12 50

SHINGLES.	
Cypr., No 1 h'rts, sawed, 6x20.	\$6 25 @ 7 00
No. 1 saps, sawed, 6x20.	4 75 @ 5 00
No. 1 hearts, shaved, 6x20.	6 00 @ 7 00
No. 1 saps, shaved, 6x20.	4 75 @ —

LATHS.	
White pine.	\$1 90 @ 2 10
Spruce.	2 10 @ 2 15
Cypress.	1 55 @ 1 65

Norfolk.

[From our own Correspondent.]

Norfolk, Va., October 18.

The local lumber market is in fair shape at present, and although there are complaints of poor prices and a want of snap and vigor to the general market, still there is a good average trade in most departments. There is without doubt a good demand, and buyers are plenty, while holders are firm as to prices and refuse to sell except at outside figures. Stocks are by no means excessive, and,

in fact, No. 1 grades are only to be had in limited quantities, and shipments of all lumber are being made nearly as fast as they can be cut. Box grades bring good prices, while stocks are very low. The movement in air-dried lumber is not what it might be; receipts, however, are light, and a better trade is not expected while stocks in Baltimore are so heavy and such slow sale. There is a good export business growing with foreign ports for North Carolina kiln-dried lumber, and several mills here are getting some good orders for Great Britain and the Continent. Planing mills seem to be all busy, and have plenty of orders on file, but there seems to be very little improvement in prices. Box factories are doing a good business in the manufacture of oil cases, and other woodworking concerns are working on full time. There is a good local demand for lumber and other building material from builders and contractors, and it is stated that from now on throughout the winter extensive improvements in various sections of the city and suburbs will be completed. Rates of freight on lumber are firm, with a scarcity of tonnage. Rates to New York are \$2 and \$2.10, and to Boston \$2.60 and \$2.75.

Charleston.

[From our own Correspondent.]

Charleston, S. C., October 18.

There has been a fairly active movement in nearly every department of the lumber market during the week under review, and at nearby milling points operations have been of greater proportion. There is a fair demand from Northern ports for lumber, and prices for all desirable grades are very steady. At no particular locality is there any surplus stocks, and mills generally ship their output as fast as it can be turned out. At Georgetown the Gardner & Lacey milling plant is about to be furnished with a well in order to supply the company with water which can be used, the present supply not being of a quality adapted to its boilers. The company will bore a deep well on its mill-yard, perhaps to a depth of 500 or 600 feet, and if successful it will be independent of the river water. The schooner Warren B. Potter sailed last week from Georgetown for Boston with a cargo of yellow-pine lumber from the mills of Jacob Savage, and the schooner Eva A. Danenhower for Norwich, Conn., with a cargo of cypress lumber and shingles from the Gardner & Lacey Lumber Co. The following vessels cleared from this port last week: Schooners D. K. Baker with 400, 892 feet of lumber, and the Clara E. Bergen with 371,262 feet, both for New York. The Clyde steamer Comanche, for New York, took out 18,300 feet of lumber, with other cargo, and the Iroquois 14,730 feet. The steamship Delaware, for Boston, cleared with 8160 feet of lumber and other cargo. The total domestic shipments of lumber from this port from September 1 to October 15 amounted to 4,063,203 feet, against 6,476,759 feet last year. Coastwise lumber freights are at present quiet, with rates unchanged. Lumber to New York is quoted at \$4.38 to \$4.50; wet ties to Perth Amboy, 15 cents each, basis forty-six feet; dry railroad ties to New York, 11 1/2 cents, basis thirty-six feet. A schooner, 319 tons, was chartered in New York last week to load lumber at this port for New York at \$4.75, and a schooner, 712 tons, same voyage with cross-ties at 14 1/4 cents.

Savannah.

[From our own Correspondent.]

Savannah, Ga., October 18.

With the increased activity in shipments of cotton and naval stores at this

port the movement in wood products has also shown a decided improvement. The demand for lumber and crossies is quite pronounced at the moment, and from nearby ports and interior milling sections the situation is regarded by manufacturers and shippers as very satisfactory. During the past week the firm of E. B. Hunting & Co. report their shipments of lumber as heavier than usual, this firm having shipped on the 16th inst. 1,745,026 feet of pitch-pine lumber. The Georgia Lumber Co. and other representative shippers have all been busy and making heavy shipments. The lumber dealers at Cordele report orders from the North and Northwest as quite numerous, and prices improving. The Seymour Lumber Co. at that place reports the business outlook for lumber as bright, with unusual activity in all branches. The local demand for lumber and other material for building purposes is active, as at present there is more work being done in that line than at any time in the past five years. The improvements are not confined to dwellings, as many new stores and public buildings are in course of construction, all creating a demand for lumber and other material. During the past week the following shipments of wood products are reported: Schooner William C. Wickham for New York with 252,183 feet of pitch-pine lumber; schooner Agnes Manning for Perth Amboy with 695,511 feet; schooner Frank Vanderherchen for Philadelphia with 366,202 feet. New York steamers took out 218,690 feet, Baltimore steamers 141,150 feet and Boston steamer 51,538 feet. The schooner John B. Manning arrived on the 16th inst. from Boston to load a cargo of crossies for New York. The market for lumber on Saturday closed firm, with values as follows: Ordinary sizes, \$10.50 to \$11; difficult sizes, \$12 to \$14; flooring boards, \$15 to \$17; shipstuff, \$14.50 to \$18, and sawn ties, \$9.50. Freights on lumber are firm at ruling rates. The rates from this and nearby Georgia ports are quoted at \$4 to \$4.50 for a range including Baltimore and Portland, Me. The following charters were reported in New York last week: A schooner, 489 tons, from Fernandina to New York with lumber at \$4.75; schooner Lizzie B. Willey from Brunswick to New York with lumber at \$4.75; schooner Harry B. Ritter, 587 tons, from Philadelphia to same with coal at 80 cents, and back with lumber at \$4.25, option New York, and schooner Ed Stewart, 353 tons, from Brunswick, Union Island or Satillo to New York with lumber.

Mobile.

[From our own Correspondent.]

Mobile, Ala., October 18.

The lumber and timber market is beginning to show a little more activity, and the conditions which have surrounded the industry are somewhat more favorable for a better business. Both receipts and shipments have been light during the past thirty days, but it is expected that during November the export trade will revive. Hewn timber, when placed on the market, will bring 12 cents, basis of 100 cubic feet, average B1 good. Contracts are only nominal. Hewn oak is in moderate demand at 18 cents for first-class. The demand for poplar is limited at 12 cents per cubic foot for large average girth. Sawn timber, when placed on the market, will bring 11 cents per cubic foot, 40-foot basis. Cypress is steady at 5 to 8 cents per cubic foot. There is no demand for round poplar, oak or hickory logs. During the past week the following vessels cleared from this port: Steamer Utstein for Havana with 300,000 feet of lumber; ship Birma for Buenos Ayres, A. R., with 746,695 feet,

and steamer Columbia for Bocas del Toro with 12,000 feet. The exports of hewn timber since September 1 amount to 57,510 cubic feet, against 47,135 cubic feet a year ago, and of sawn timber 36,928 cubic feet, against 331,441 feet last year.

Lumber Notes.

N. L. Stafford, of Kingsland, Fla., has purchased J. W. Peebles' saw mill, and will continue the business of manufacturing pine and hardwood lumber.

A charter was granted last week to the Tie & Timber Co. at Ellzey, Fla., with a capital of \$5000. The incorporators are Grant Green, Jr., Louis G. Muller and Franklin B. Muller.

The Cameron Lumber Co., at Point Washington, Fla., was chartered last week, with a capital of \$10,000. The incorporators are J. J. McCarkhill, John M. Garrett and John Cameron.

A charter was granted on the 10th inst. to the Apalachicola Lumber Co., of Apalachicola, Fla., with a capital of \$50,000. The incorporators are C. T. Buffum, Charles J. Harris and A. L. Buffum.

The planing mill of C. W. Rich, located six miles south of Richburg, Miss., was burned on the 7th inst., with twelve cars loaded with lumber. The loss is between \$20,000 and \$35,000, with no insurance.

The Hollgrewe-Vornbrock Furniture Co. was incorporated at St. Louis, Mo., last week, with a capital stock of \$15,000, all paid in. The incorporators are George Hollgrewe and Otto H. Vornbrock.

Blackwell & Delamar, whose saw-mill plant is located at Oriental, N. C., will commence sawing North Carolina pine lumber about November 1. Their facilities are good for water shipments to Northern ports.

A charter was granted last week to the Kidder Lumber Co., of Wilmington, N. C. Messrs. Kidder and Cantwell are the incorporators. The capital stock is \$50,000, and the principal office of the company will be at Wilmington.

The Carrollton Steam Wood Yard & Excelsior Manufacturing Co., Limited, was incorporated last week in New Orleans, with a capital stock of \$5000. The incorporators are John J. Hecker, Geo. Fehl, Jr., and William R. Goll.

M. F. Wharton, of Valley View, near Richmond, Ky., has sold his large mill plant at that place to the Barker Cedar Co., of Chicago, for \$6500. The purchasers will on receipt of logs commence operations with a full force of hands.

During the month of September one firm in Darien, Ga., loaded four steamships with 8,000,000 superficial feet of sawed pitch-pine lumber and deals. At the present time the stock of timber at Darien amounts to probably 25,000,000 feet.

Messrs. Vaiden & Harris, of Kent county, Virginia, have sold to Baltimore parties their saw mill and timbered property near Oak. It is said that the purchasers will lay a tramway from the mill to the river and ship their lumber direct to Baltimore.

It is stated that the extensive saw-mill plant of Newman & Spanner at Ironton, Ohio, recently destroyed by fire, will not be rebuilt at that place. It is understood that the mills in all probability will be located at Huntingdon, W. Va., or at Central City, two miles west.

A. H. Leathers, of Mt. Eagle, Pa., visited Dickson, Tenn., last week to make an inspection of the hickory timber in that section with a view to locating an axe and hammer-handle factory. Mr. Leathers has also considered Johnson-

ville as a location, and may establish a branch in that town.

Messrs. Morgan & Gardner, whose saw and planing-mill plant at Charleston, W. Va., was destroyed by fire recently, have rebuilt on a larger scale. Their plant, which is now among the best equipped in the South, is in full operation, the firm having decided to adopt nothing but the most modern and desirable machinery.

The saw mill, planing mill, dry-kilns, sheds and lumber on the yard of the Forest Hill Lumber Co., Limited, located on the Kansas City, Watkins & Gulf Railroad, twenty-one miles south of Alexandria, were destroyed by fire on the 6th inst. Nearly 3,000,000 feet of lumber was destroyed, and the loss is estimated at \$35,000; insurance about \$26,000.

A deal was closed last week by which the Callaghan Bros., a large shipbuilding firm in Michigan and Ontario, Canada, have purchased the timber from the Rowan heirs, located on a tract of land on Green river. The price paid was \$20,000, the purchasers to take all timber that will square twelve inches. It will be shipped to Canada for shipbuilding purposes.

Iron Markets.

Cincinnati, Ohio, October 16.

The matter of general comment now is the heavy decrease in stocks of pig iron during September. While all expected a falling off, not many anticipated that the increased production would be absorbed and over 170,000 tons drawn from the stocks on hand. At this rate four months would wipe out all accumulations.

During the past week there has been the usual run of small orders, with a few of notable size. One of the Ohio malleable iron firms covered its wants for coke iron with deliveries, it is said, running through 1898. One furnace company that was asked to quote put up its price \$1 per ton, fearing an advance in both ore and coke.

The coke situation is apparently mixed, for while an advance is intimated in certain districts, other producing fields of importance are willing to contract at present figures for 1898.

The Pocahontas Company on October 1 withdrew from its former selling arrangements and changed its agents. It controls about 2800 ovens, and is the ruling factor in that district.

Northern irons have sold quite freely, and a number of inquiries have been made for Lake Superior charcoal brands.

Southern car wheel iron transactions are principally confined to the Rome (Ga.) furnace, that has run steadily in spite of the depression in that class of material. Several sales of 500-ton lots at full prices were made.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry...	\$10 00
Southern coke No. 2 foundry...	9 75
Southern coke No. 3 foundry...	9 45
Southern coke, gray forge...	9 25
Southern coke, mottled...	9 00
Southern coke No. 1 soft...	10 00
Southern coke No. 2 soft...	9 75
Belfont coke No. 1, Lake Sup.	11 00
Belfont coke No. 2, Lake Sup.	10 50
Hanging Rock charcoal No. 1...	14 50
Tennessee charcoal No. 1...	12 50
Jackson Co. silvery No. 1...	12 50
Standard Georgia charcoal...	14 25

New York, N. Y., October 16.

The market the past week has shown no change in any particular. Orders are readily obtained for fair-sized lots at full prices, buyers realizing that there is no hazard at figures current. No one seems to fear any reaction or decline in prices. The pessimists are not in evidence. General business in all branches continues to expand in all directions. The railroads show increased earnings, prov-

ing beyond question an enlarged traffic. The stock and bond markets are more active, and values are steadily improving in a legitimate way. From the best data obtainable, it is believed we are now producing at the rate of fully 10,500,000 tons pig iron per annum. About all the furnaces are in blast in the North that will probably be able to make iron this year, and there seems no likelihood of much expansion of product in the South, as the coke output is about all utilized. It will be borne in mind that while there have been very few furnaces built since '92, many of the olders ones have been modernized and with the better facilities have an increased capacity. The general belief obtains that we are entering upon an era of general prosperity, and if it is to be realized and the country go on in anything like the old-time strides in pig-iron production, there will have to be more furnaces built in the near future to meet the expected demand. There is an absolute scarcity of some Southern grades, and many of the Northern furnaces have cleaned up their surplus stocks entirely.

As predicted a week ago, the speculative lots of Bessemer have been in part bought by consumers and in part withdrawn from the market, so that Bessemer is steady again at legitimate figures.

We quote cash f. o. b. New York:

No. 1 X standard Alabama...	\$11 00	\$11 25
No. 2 X standard Alabama...	10 50	10 75
No. 1 X lake ore coke iron...	12 50	12 75
No. 2 X lake ore coke iron...	12 00	12 25
Niagara coke malleable...	12 00	12 25
Standard Georgia charcoal...	15 00	15 50

Philadelphia, Pa., October 16.

There is no change in the situation since our last report, orders coming in from a widely-scattered territory and covering the general run of coke and charcoal irons. There seems to be considerable difficulty to secure cars enough to ship all of the iron that is needed on old contracts, and in many instances this causes considerable trouble to the consumer.

We quote for cash f. o. b. Philadelphia:

No. 1 X standard Alabama...	\$11 50
No. 2 X standard Alabama...	11 00
No. 1 X lake ore coke iron...	12 50
No. 2 X lake ore coke iron...	12 00
Niagara coke, malleable...	12 50
Standard Georgia C. C.	15 75

ROGERS, BROWN & CO.

The Nicaragua Canal.

Editor Manufacturers' Record:

I notice the article in your issue of September 24 on the commercial importance of the Nicaragua canal. Of course, we of the South and West all agree as to the great benefit from a commercial point of view, and we fully agree on this point with the writer of this article, but I am surprised that this learned writer should omit to mention the importance of the canal from a military point of view. Should war occur between the United States and any nations of importance they would likely attack us at our weakest point, which would be on the Pacific coast. It is true that we have a number of railroads that could be used to transport troops to the Pacific, but a war with a European power would be a maritime war. Our warships would be divided, while they could attack us in detail. The opening of the Nicaragua canal would enable Uncle Sam to concentrate the navy at any given point. Then, too, our government must own and control the canal. We want no partnership with any other nation.

Houston, Texas. WM. HUNTER.

According to a dispatch from Georgia, an important discovery of monazite has been made in Rabun county by State Geologist Yeates, of Atlanta. Thus far most of the monazite has been found in North Carolina, where it is secured in large quantities.

MECHANICAL.**Hand Planer and Jointer.**

Many new and valuable features are possessed by the hand planer and jointer illustrated. The heavy

grip, so that the table is firmly held in position. The tables are seven and a-half feet in length, of ample thickness, and heavily ribbed and braced, so that the surfaces will remain absolutely true. The steel lips which form the edges of the table are brought very close to the

to the rear one. Both bearings are self-oiling, and capable of adjustment without use of liners or wedges. The bearings are yoked together, and therefore always in line, and the downward extending spout affords a convenient means of attaching a pipe for the purpose of re-

cross-graining, tenoning, etc. A special jointing device is furnished, by which the cutting edges of the knives are kept absolutely true with the rear table and with each other.

The countershaft, which is always included, is fitted with an improved, self-oiled differential loose pulley, and should run 850 revolutions per minute. Tight and loose pulleys are ten inches diameter by six-and-a-half-inch face; floor space required, seven and a-half feet by three feet; weight, 1200 to 1800 pounds.

For prices and further information, inquire of the manufacturer, the E. & B. Holmes Machinery Co., of 59 Chicago street, Buffalo, N. Y.

Heavy Four-Sided Moulder.

A new seven-inch four-sided moulder, as shown, is now on the market. The frame is cast in one piece, and well braced. The feed works consist of two top rolls three inches diameter and one roll in bed, all driven and powerfully geared together. The hood over the top head is provided with patent hinged chip-breaker to prevent waves on surface of material. The pressure foot directly in the rear of top head is hinged, and may be thrown out of way to give access to cutterhead. The extra adjustable pressure between the two side heads will be found of great convenience. The pressure foot over undercutter is hinged, and swings out of the way to give access to underhead. The inside and outside headstocks are both provided with horizontal and vertical adjustments, and may be set to an angle. The belts for these two heads pull directly against the bottom of the boxes. The top headstock has lateral adjustment, and the arbor is provided with a substantial outside bearing. The undercutter has both horizontal and vertical adjustments, and the tailpiece in rear of undercutter swings out of the way. There are adjustable throat plates on both sides of undercut-



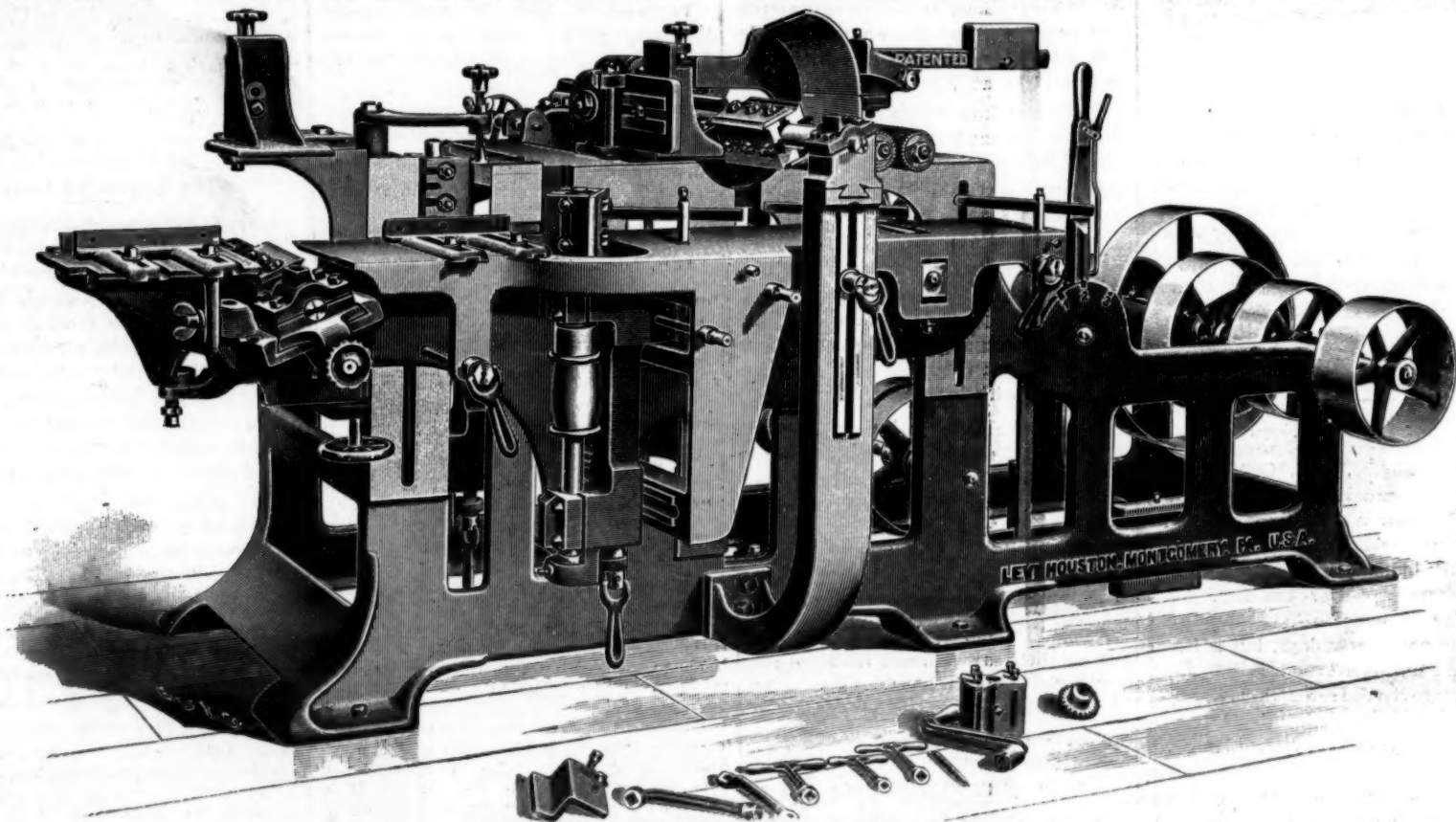
HAND PLANER AND JOINTER.

cored frame has a broad triangular base, which gives three points of bearing on the floor. The triangular base, being narrow at the working end of the machine, enables the operator to stand close to the machine without danger of treading upon the range.

The table carriages are accurately fitted to the planed top of the main

cutters, thereby giving the smallest possible opening. Both tables can be drawn away from the cutterhead, giving free access to the cutters for the purpose of sharpening and setting. The cutterhead is a solid steel forging slotted on four sides and provided with special steel bolts for holding the cutters securely in place, and while the circle described by the cut-

moving the shavings. The adjustable bevel gauge can be easily and quickly adjusted to any desired angle. The safety guard, which covers that portion of the cutterhead not in use, is hinged to the rear table, and when not required in use remains suspended at the side of the machine. Spring attachments are furnished when desired by which mouldings



NEW HEAVY SEVEN-INCH FOUR-SIDED MOULDER.

frame, and are provided with long inclined ways to which the tables are securely gibbed, so that perfect alignment is maintained at all times. The front table is provided with an independent lever movement by which the depth of the cut can be instantly varied to suit class of work. This lever is counterbalanced, and is provided with a friction

ters is as small as possible, the journals are unusually large, the rear one being two inches in diameter and of ample length. The front bearing is provided with a flat steel cap, which permits rabbeting to be done seven-eighths inch in depth and of any desired width, the stock being supported by a projecting arm secured to the front table and extending

of all kinds can be worked to good advantage. Means are provided whereby hollow glue joints can be made on this machine as readily as straight ones, and it is capable of doing a large range of work, such as squaring, smoothing, taking out of wind, glue jointing, beveling, chamfering, rabbeting, moulding, tonguing and grooving, beading, cornering,

ter. The inside head has adjustable chip-breaker and take-up. The lever is in convenient position to operator, and when in position No. 1 the tightener is on feed belt, and when in position No. 2 it is off, and the feed stops, and when in position No. 3 the feed rolls are raised up off the material, and it may be pulled back out of the cutters. The journal

boxes on top and underheads are on an incline. The table is clamped to frame at three points, and will lower nine inches.

Four steel-forged four-slotted heads and one steel cap head are furnished with each four-sided machine, together with all necessary springs and wrenches, and one pair straight cutters with each four-slotted head. Side spindles are provided with patent self-oiling steps.

Four rates of feed are provided, viz., twenty-four, thirty-two, thirty-eight and forty-six feet per minute.

Tight and loose pulleys 10½x6, and should make 900 revolutions per minute. For prices or other information address Levi Houston, manufacturer, Montgomery, Pa.

The Samson Belt Fastener.

The new belt fastener which the Samson Steel Belt Hook Co., 221 Evelina street, Philadelphia, is putting on the market is made of steel and is perfectly flexible. The idea of the inventor has been to design a fastener which should possess all the advantages of a rawhide lacing and yet be brought into service as quickly as any known fastener. The fastener is made from a piece of strip steel, and is so patterned that there are two

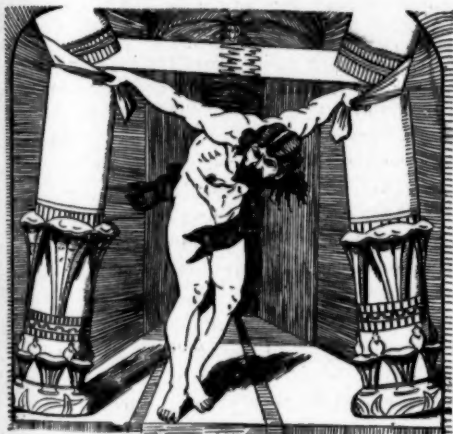


FIG. 1.

series of projections or grips along each edge, alternating long and short, each projection tapering from the strip outwardly to a sharp point. The outer portions of these projections are bent down at right angles, forming points which pass through a belt, and are intended to be clinched on the under side. The projections on one side are staggered in relation to those on the other side, so that each projection or tooth pulls on two opposite projections in accordance with the

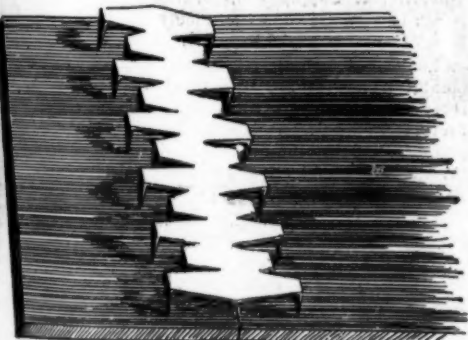


FIG. 2.—SECTION OF LACED BELT, SHOWING SAMSON FASTENER.

rawhide lacing principle. The maker states that the finest quality of flexible steel is used in the manufacture of the hook, the same giving a maximum strength with a minimum quantity of metal. A point it makes is that the teeth being narrow and sharp, they are easily driven through the belt without injury to it, no leather being removed from the belt or even the fibres broken. These advantages, it claims, should be appreciated, particularly when a fastener is to be used on an old belt, as with the double

row of teeth the possibility of cutting the belt or tearing out of the fastener is reduced to a minimum. The fastener is adapted to any kind of belt, leather, rubber or cotton, and will run smoothly, it is claimed, and noiselessly, without slipping or jumping in rounding large or small pulleys.

The Martian. By George Du Maurier. Publishers, Harper & Bros., New York.

In handsome cover and with characteristic illustration by the author this unique treatment of the English life half a century ago, which appeared serially in Harper's New Monthly Magazine, is now of a form suitable for the drawing-room table or the library. Ostensibly it is fiction hinging upon the fad of the reincarnation theory, but the reader cannot escape the impression that an artistic mind has indulged in a little reincarnation on his own account, and that he has dealt with actual persons whose identity might be revealed by one or two master strokes. This impression is tantalizing, but it adds to the piquancy of the story of the love and triumph of Barty Josselin under the sway of Martia the intangible. Du Maurier is dead, but he breathed much of his life into his last novel.

Under Two Flags. By "Ouida." Publishers, The J. B. Lippincott Co., Philadelphia.

This is the first publication we have seen with the date "1898" on its title page. We take that as an intimation that the novel is intended to meet the holiday demand. This impression is strengthened by the artistic form in which the two volumes have been issued as one. The novel, tracing the experiences of younger scion of the English nobility in the Household Guards, on the turf, at European resorts of fashion and as a soldier of France in the African desert, leading him in apparently inextricable difficulties because of his devotion to a younger and weaker brother and of his chivalry, is full of dramatic situations, and presents phases of life not usually brought to the attention of the reader of fiction.

TRADE NOTES.

To Dismantle Furnaces.—Messrs. Poulterer & Co., of Philadelphia, have purchased from the Bethlehem Iron Co. the Blingen blast-furnace plant, at Bingen, Pa., also the Neal furnace at Bloomsburg, Pa. Both plants will be dismantled.

Manufacturers in China and Japan.—Mr. Alfred H. Hart (address until October 30 Lick House, San Francisco, Cal.) will locate an office at Yokohama, Japan, and travel into China and Japan in the interest of American manufacturers as a selling agent.

Carpet Loom.—The M. A. Furbush & Son Machine Co., of Philadelphia, has placed in the "Novelties Exhibition" at the Philadelphia Bourse, opening October 15 and continuing until December 15, one of its new Murkland high-speed Ingrain carpet looms, running on the new "Heald" weave. The loom is operated by electric motor.

Spring Works.—Devoted to the exclusive manufacture of springs, from the finest wire to the heaviest wire, the Hansell Spring Co., of Newark, N. J., claims its ability to supply anything in its line. The company has an unquestioned reputation for the quality of its goods, established by years of honest effort and concentration.

Belting.—In a circular addressed to belt-users, the Rossendale-Reddaway Belting & Hose Co., of Newark, N. J., presents its claims for the superiority of camel-hair belting. The company has been manufacturing and introducing this belting for some years, and claims that it has great strength, durability, uniformity of thickness; that it is suited to dry, hot atmosphere, or wet and damp work, or exposed

drives. This belting is recommended so strongly by its users and by its maker that it is worth consideration by intending purchasers in this line.

Webster Steam Heat.—A number of new contracts for the Webster system of steam heating have been made by Messrs. Warren Webster & Co., of Camden, N. J. Among them are the Vermont State prison; insane asylum at Hopkinton, Ky.; Parkside apartment-house at Philadelphia; shoe factory at Campello, Mass.; lead works at Forest River, Mass., and passenger station at Cincinnati, O.

Cableway.—Messrs. Williams & Schmid, of Granville, N. Y., have erected at their quarries one of the Lidgerwood travelling cableways, manufactured by the Lidgerwood Manufacturing Co., of 96 Liberty street, New York city. The quarries report that this cableway is a great success, and they are more than pleased with it, as it does more work than ten-inch cables, and at much less expense.

Enlarging Facilities.—Owing to the growing demand for its brass and iron specialties, the Lunkenheimer Co., of Cincinnati, O., has again enlarged its facilities by adding a four-story building, 50x50 feet. This building has been fitted out for offices, and the former building is being utilized for manufacturing purposes. These superior facilities will enable the company to make prompter shipments than heretofore.

Foundry for Sale.—A foundry and machine business, established in a growing Southern city for forty years, is being offered for sale by Mr. Charles Tyler, of 1415 Madison avenue, Baltimore, Md. The plant is fully equipped, now in operation, has a good local trade, a growing export trade, and, by proper attention, can be much enlarged. Prospective manufacturers would probably benefit by investigating this.

A Good Dividend.—The regular quarterly meeting of the board of directors of the Davis & Egan Machine Tool Co., of Cincinnati, O., was held October 14. A dividend of 3 per cent. was paid to all stockholders of record out of the earnings for the past three months. This company reports a rapidly increasing business, both at home and abroad, and, to keep up with its orders, is now running the entire plant seventy-five hours per week.

Temperley Transporters.—We learn that the new North German Lloyd steamer Kaiser Wilhelm der Grosse has been furnished with two Temperley transporters for loading and unloading freight, coal, etc. The Lidgerwood Manufacturing Co., 96 Liberty street, New York city, has the sole rights for the manufacture of the transporter in the United States, and we have already noted its adoption aboard the United States battleship Massachusetts.

More Government Contracts.—The Buffalo Forge Co., of Buffalo, N. Y., will build the fans and engines required for torpedo-boats Nos. 12 and 13. Four blowers are required for this installation. The engines are directly attached to the fans; every fan is of a special design to suit the space in which it is to be placed. The capacity of each fan provides for supplying air for 900 indicated horse-power of boilers. The system of forced draft is the inclosed stokehold, air pressure being about three inches. The engines are of a special type, having inclosed cylinders to prevent dust getting into the reciprocating parts.

Largest Generator.—A notable addition to the already extensive electrical plant at Niagara Falls, N. Y., will be made in the form of a General Electric Co. electrolytic generator, which will be the largest of its kind ever constructed. It will be both liberally and carefully designed, to enable it to cope with the very severe service of electrolytic work, i. e., for practically continuous operation. This machine will have fourteen poles, and will run at 257 revolutions, giving an output of 5000 amperes at 175 volts, or a capacity of 875 kilowatts; directly connected to the water-wheel shaft; provided with a special panel switchboard, with full form K equipment of instruments necessary to handle a current of 5000 amperes.

Turbine Wheels, Power-transmitting Machinery, etc.—An important transaction in the machine business was the recent purchase by Mr. John W. Taylor, of Baltimore, Md., of an interest in the S. Morgan Smith Co., of York, Pa. Mr. Taylor was agent for a number of years, in Atlanta and Baltimore, of the Stilwell-Bierce & Smith-Valle

Co., of Dayton, O., and later was agent at Baltimore for the Buckeye Engine Co., and he is well known throughout the South wherever machinery is in use. The S. Morgan Smith Co. is engaged largely in the manufacture of turbine water-wheels, power-transmitting machinery, sheet-iron and structural work, rotary fire pumps, etc., and is to be congratulated upon obtaining the services of such an efficient introducer of machinery as Mr. Taylor. Mr. Taylor's office at present is in the Manufacturers' Record Building, Baltimore, Md.

Tourist System.—Inestimable in its advantages to the pleasure-traveling public is a perfect tourist system. The joy of traveling, sightseeing and visiting famous regions is unalloyed. There are no distracting fears of missing train connections; no long and tiresome lay-overs; no changes of cars at untimely hours; no hustle and bustle after meals; one's train goes with him, and stops and waits for him while he visits points of interest; baggage is ever at his hand, and whether crossing mountains or deserts, or wherever he may be, traveling by day or by night, he may eat his meals at regular hours and rise and retire as regularly as in his own home, as offered by the Pennsylvania Railroad. That tourists appreciate all these advantages is evidenced by the gratifying success of former years, and it is anticipated that the season of 1897-98 will witness no diminution in the patronage. For full information regarding these tours apply to ticket agents or address George W. Boyd, assistant general passenger agent, Broad Street Station, Philadelphia.

TRADE LITERATURE.

Steam Regulating Devices, etc.—Under date of October 1 the Mason Regulator Co., of Boston, Mass., has issued a price-list and catalogue (illustrated) of its steam regulating devices and steam pumps. Complete descriptions and illustrations are given of the many Mason devices.

The National Lubricator Co., of 107 Montgomery street, New Albany, N. Y., has issued a leaflet devoted to an exposition of the lubricator manufactured by it. This device is automatic, with sight-feed attachments, and the makers claim that by its use oil lasts longer, fuel lasts longer and engine lasts longer.

Lanterns.—"Baron" is a name that has been connected with the manufacture of lanterns since 1838, and the goods bearing that name have been constantly improved, until the latest catalogue of the makers shows the latest and most perfect productions. Catalogue No. 33 is now ready for distribution by the Ohio Lantern Co., of Tiffin, O., which manufactures these lanterns.

Doings of Expanded Metal.—A publication with this title has been issued by the Associated Expanded Metal Companies of Chicago, New York, Baltimore, etc. Its object is to illustrate and describe the more prominent buildings in which "expanded metal" is used, and the articles will doubtless be found novel and instructive. The D. O. Mills building, in New York, is described in the current number of the publication.

The Proof of the Pudding Is in the Eating.—In a pamphlet with this title the Davis & Egan Machine Tool Co., of Cincinnati, O., has printed a few proofs from those who have eaten. The company's claims for its extensive line of machine tools, which it designs and builds, are therein set forth as proven by the many letters received from large users of machine tools throughout the country. These latter express themselves as highly gratified with the satisfaction obtained from the use of Davis & Egan machinery.

Valuable Catalogue.—The 1897 catalogue of the American Ship Windlass Co., Frank S. Manton, agent, Providence, R. I., is a work that should be on the desk of every shipowner and shipbuilder for reference. It is excellently printed, illustrated and indexed, containing descriptions and explanations, price-lists, etc., of the various manufactures of this company, which are all of high reputation, won solely by their merit. Many improvements have been brought out and great saving gained by the use of the machines of this company, by which great benefits have been conferred upon the shipping community. The company's new steam towing machine, that has been brought out lately, is the admiration of experts. It is a benefit to naval architects and consulting engineers to know such machines and their advantages.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Huntsville—Woodworking Factory.—An Indiana company has about decided to establish at Huntsville a factory for the manufacture of hickory and oak carriage and buggy material. H. W. Russell can be addressed for information.

Montgomery—Grocery Company.—Incorporated: The Warren Grocery Co., capital stock \$32,000, to engage generally in the wholesale and retail grocery business. The incorporators are R. W. Shaw, J. F. Dennis and A. F. Warren. Address the last named.

Selma—Cotton Mill.—The Messrs. Cawthon and associates, recently noted as having purchased the Matthews Cotton Mills for \$70,200, write that they expect the mill will cost them fully \$100,000 by the time they commence operations. Many improvements will be made and some new machinery added. Address Dr. O. F. Cawthon, Stonewall, Miss., for further information.

ARKANSAS.

Hot Springs—Bridge.—The county levying court has appropriated \$11,000 for the construction of a bridge across the Ouachita river, near Hot Springs. Address the county clerk.

Little Rock—Compress.—The Little Rock Compress Co. will enlarge its compress, tripling the capacity, and enabling it to handle 12,000 bales of cotton without piling and 40,000 by tiering. Address J. W. Pope, secretary-treasurer.

FLORIDA.

Ellzey—Timber Company, etc.—Incorporated: The Peninsular Tie & Timber Co., with a capital stock of \$5000, to buy, sell and lease timber lands, and buy, sell and manufacture lumber. The shareholders are Grant Green, Jr., Louis G. Muller and Franklin R. Muller. Address Grant Green, Jr., Peninsular Tie & Timber Co.

Fort Meade—Tobacco Cultivation, Irrigation System, etc.—A company will probably be formed for the purpose of cultivating tobacco, and an irrigation system will be constructed. F. C. Davie can be addressed.*

Gainesville—Ice Factory.—Stringfellow Bros. will erect an ice factory of ten tons capacity, and not J. F. Edwards, as has been stated; lumber for the buildings is now on the ground and negotiations for machinery are in progress.

Lake City—Packing-House.—The A. B. Hart Florida Tobacco Co. has completed a packing-house and curing establishment for tobacco leaf.

Leesburg—Tobacco Cultivation, etc.—Chartered: The Leesburg Tobacco Co., with \$2500 capital, to cure tobacco, operate a warehouse, etc. G. E. Lovell, J. H. Randolph, A. P. Jordan, J. O. Abbott and J. B. Gaines are the incorporators.

Orlando—Ice Factory.—J. W. Talbot and George E. Macy contemplate the erection of an ice factory.

Pensacola—Sewerage.—The city clerk informs us that the proposed sewerage, to which mention has been made previously, will be an extension of the present system. Probably \$50,000 will be expended on the work. For information address F. Glackmeyer, clerk of city.

Pensacola—Publishing Company.—R. F. Smith, Geo. W. Childerson and others have incorporated the Times Publishing Co., with capital stock of \$10,000, for newspaper publishing purposes.

Quincy—Electric-light and Ice Plants.—The town contemplates the erection of an electric-light plant and an ice factory; ice factory to have daily capacity of five tons; electric-light plant, capacity of twenty 2000-candle-power arc lights and 600 incandescent lights. For information address Wm. M. Corry.*

GEORGIA.

Atlanta—Hat Factory.—Goldfarb & Silberstein, of 117 Bleeker street, New York city, will remove their cloth and plush hat and cap factory to Atlanta, locating at 103 Decatur street. Over thirty men will be employed.

Atlanta—Flour Mill.—The Sweetwater Milling Co. will not erect the large flour mill reported, but a separate company will be organized by parties interested in the Sweetwater Company. Application has been made for charter, the incorporators being John B. Whitman and John L. Hutcheson, of Sweetwater, Tenn., and W. F. Hutcheson and S. H. Campbell, of Chattanooga, Tenn., with capital stock paid in \$120,000 and privilege of increasing to \$500,000. A mill will be built at once of 800 barrels of flour and 3000 bushels of meal daily capacity, with main building of brick, six stories high, 50x80 feet in dimension. A two-story warehouse of 100,000 bushels of grain capacity will also be erected.

Atlanta—Telephone System.—The Standard Telephone Co. intends establishing system of 1000 instruments inside of ninety days. Address Simon Baer, president.

Cedartown—Cotton Mill.—The Cedartown Cotton Manufacturing Co. will, instead of building the 7500-spindle mill lately noted, treble the equipment of its present plant, as stated last week. Present mill is now operating 4000 spindles.

Chickamauga—Flour Mill.—A company has been formed to establish a roller-process flour mill; machinery and building secured; Gordon Lee, president, and J. B. Henderson, secretary. Address the latter at Chattanooga, Tenn.

Cordele—Brick and Sewer-pipe Works.—S. J. Hill & Bro. have obtained control of the Cordele Brick Works, put in new machinery, erected new buildings and otherwise improved the plant, and will manufacture brick, sewer piping, flues, etc.

Georgia—Gold Mines, etc.—Pope Bros., of Parkersburg, W. Va., have sold a gold mining property in Georgia to Gen. A. J. Warner and associates for \$75,000, and not \$25,000, as our recent report was made to say by an error of the types. The purchaser intends to arrange for developments, erection of milling plants, etc. For information address Pope Bros.

Madison—Cotton Mill.—J. H. Kennedy, of Columbus, Ga., has made a proposition, through the Bank of Madison, for the erection of a 2000-spindle cotton mill in Madison.

Savannah—Cotton Mill.—A Mr. Hale, of New York, has made a proposition to erect a \$300,000 cotton mill in Savannah. Col. J. L. Whatley, of Savannah, has the proposition.

Savannah—J. P. Williams & Co. have in-

corporated as the J. P. Williams Co., with capital stock of \$250,000, by J. P. Williams, J. A. G. Carson and John Morrison.

Thomaston—Electric-light Plant.—Dr. G. W. T. Hannah and associates intend to build an electric-light plant.*

KENTUCKY.

Owensboro—Bicycle Factory.—Ben Hare is forming a company, with capital of \$50,000, to buy and enlarge the Delker bicycle factory; fifty men will be employed.

Paducah—Vehicle-parts Factory.—The Lack Singletree Co. has been incorporated with F. E. Lack, president, and James Sevier, secretary, to manufacture the Lack patent singletree, double-trees, neck-yokes, etc. A factory of 400 dozen daily capacity is now being erected. Address Mr. Lack as above.*

LOUISIANA.

New Orleans—Excelsior Factory, etc.—The Carrollton Steam Wood Yard & Excelsior Manufacturing Co. has been incorporated, with capital stock of \$5000, to operate excelsior factory, wood-yards, etc.; John Joseph Hecker, president, and George Fehl, secretary-treasurer.

New Orleans—Mercantile.—The William Grocery Co., Limited, has been incorporated, with capital stock of \$5000, by James H. William, Thomas E. Evershed and others.

MARYLAND.

Baltimore—Grain Dealers.—The Pitt Bros. Co., for conducting a general grain and commission business, has been incorporated by George A. Frederick, Pembroke W. Pitt, Clarence M. Pitt, William G. Gorman and Henry E. Wack. The capital stock is \$10,000.

Baltimore—Publishing Company.—The Merchants' Postal Guide Publishing Co. has been incorporated by Ernest Green, Joseph A. Abbott, Edward W. Baker, John B. A. Whittle and Louis Schneeberger, with a capital stock of \$5000.

Baltimore—Glass Works.—Incorporated: The Monumental Glass Co., by Elias Mischeau, John William Fisher, Charles H. Blachoff, Henry A. Harig and William A. Gardner, with a capital stock of \$10,000. The company will conduct a general glass-manufacturing business.

Baltimore—Paint Factory.—James B. McNeal & Bro., South Calvert street, have leased a lot and building 100x200 feet in dimension from the Spring Garden Wharf & Land Co. and will establish a paint factory on the property.

Cecil County—Gold Mining.—Richard West and W. W. Davis, of Port Deposit, Md., and James F. Haines have purchased what is said to be gold-bearing land in Cecil county and will commence operations.

Cumberland—Brick Works.—E. C. Henderson (No. 12 Seymour street) is organizing a company for the purpose of manufacturing paving, general building, ornamental press brick and hollow bricks. A large plant will probably be erected.

Hyattsville—Telephone System.—It is proposed to form a company to construct telephone system. Address W. C. Lord.

MISSISSIPPI.

Macon—Artesian Well.—The town will contract soon for the drilling of an artesian well for water supply. Address the mayor.*

MISSOURI.

Empire—Zinc and Lead Lands.—New York capitalists, represented by Austin Corbin, Jr., of New York city, have purchased a 40-acre tract of lead and zinc lands, with mine and plant, etc. The purchase was made partly from C. M. and Oscar De Graff, of Joplin, Mo., who can be addressed for particulars.

Renick—Mills.—Chartered: The Renick Mill & Feed Co., capital stock \$10,000, by S. C. Baker, W. B. Hamilton, E. E. Foster and others. Address S. C. Baker, of the Renick Mill & Feed Co.

Sedalla—Car Shops, etc.—Contract has been awarded to J. A. Dady, of Nevada, Mo., at about \$80,000, for the erection of eighteen separate buildings for the Missouri, Kansas & Texas Railway, which the latter will equip for car and coach shops, etc.

Springfield—Reservoir.—The Springfield Water Co. will probably build a new reservoir to guard against water famines; Geo. P. Westcott, president.

St. Louis—Smelter, etc.—Chartered: The Thompson Smelting & Refining Co., with a capital stock of \$40,000; incorporated by Henry Thompson, W. S. Thomas, Cole Thompson and others.

St. Louis—Brick Enamelling Plant.—St. Joseph, Mo., Philadelphia, Pa., and Omaha, Neb., capitalists will erect and operate in St. Louis a plant for enamelling brick under a new process. Messrs. McEwing & Thomas, Emily Building, St. Louis, can give information.

St. Louis—Chemical Company.—Chartered: The Senoret Chemical Co., capital stock \$50,000, by W. A. Charman, R. E. Bebout and M. P. Charman. Address W. A. Charman, of the Senoret Chemical Co.

St. Louis—Manufacturing.—Chartered: The Quinette-Bell Manufacturing Co., capital stock \$10,000, by Nicholas M. Bell, J. P. Quinette and Thomas Bell. Address J. P. Quinette, of the Quinette-Bell Manufacturing Co.

St. Louis—Lubricators.—Incorporated: The Siegrist Lubricator Co., capital stock \$25,000, by H. A. Siegrist, I. D. Worrell and James P. Dawson. Address H. A. Siegrist, of the Siegrist Lubricator Co.

St. Louis—Heating Company.—Chartered: The Cullen & Stock Heating & Ventilating Co., with a capital stock of \$10,000, by James J. Cullen, C. A. Stock and Phil Stock. Address James J. Cullen, of the company.

St. Louis—Manufacturing.—Chartered: The Salliday-Noggle Manufacturing Co., capital stock \$15,100, by S. W. Noggle, D. F. Salliday, H. F. Salliday and W. E. Comstock. Address S. W. Noggle, of the Salliday-Noggle Manufacturing Co.

St. Louis—Furniture Company.—Incorporated: The Holtgrewe-Vornbrock Furniture Co., with a capital stock of \$15,000, by Geo. Holtgrewe, Otto H. Vornbrock and Hugh Shade. Address George Holtgrewe, of the Holtgrewe-Vornbrock Furniture Co.

St. Louis—Lead Mining.—Incorporated: The Plate Lead & Mining Co., capital stock \$5000, by Anthony Will, Addison E. James, Richard R. Stinde and others. Address Anthony Will, of the Plate Lead & Mining Co.

St. Louis—Hat Company.—Incorporated: The M. Goettler Hat Co., capital stock \$7500, by Michael Goettler, J. A. Goettler, J. A. Gramlich and Catharine Goettler. Address Michael Goettler, Jr., of the M. Goettler Manufacturing Co.

NORTH CAROLINA.

Albemarle—Telephone System.—The Albemarle Telephone Co. has been incorporated with a capital stock of \$2000 by J. W. Cannon, J. S. Efrid, J. M. Morrow and R. A. Crowell to build, own and operate telephone lines from Albemarle to Concord, or to any other point within 100 miles of Albemarle. Address J. W. Cannon, Concord, N. C.

Charlotte—Electrical Company.—Dr. I. W. Faison, David S. Yates and Samuel J. Smith have incorporated the Electrical Engineering & Supply Co., with capital of \$5000, to sell and construct electrical plants, design same, etc. Address Dr. Faison.

Charlotte—Clothing Factory.—The Piedmont Clothing Manufacturing Co., reported recently as incorporated, etc., will equip its factory for a daily capacity of 500 pairs of pants. Paul Chatham, secretary, Elkin, N. C., should be addressed for information.*

Chattanooga—Telephone Lines.—The East Tennessee Telephone Co., Clarence C. Duncan, manager, will extend its lines and connect with Bristol, Tenn., Lexington, Ky., and the principal cities of the East and North. Reports say that \$100,000 will be expended in new construction.

Chattanooga—Electric Plant.—The Chattanooga & Lookout Mountain Railroad will put in new dynamos at its power-house at Clift Station. J. T. Crass, president, Chattanooga, can be addressed.

Durham—Cotton Mill.—It is reported that a 10,000-spindle mill will be erected by Julian S. Carr and others.

Hamilton—Woodworking Factory.—The Boyle Manufacturing Co. has been incorporated to manufacture lumber, shingles, hoops and handles. Its capital stock is \$3000. The incorporators are John P. Boyle, D. C. Jones and T. B. Slade, all of Hamilton. Address John P. Boyle, Boyle Manufacturing Co.

Monroe—Water Works.—The city commissioners have awarded contract to the Weger Water Supply Co., of Dayton, O., for

boring well for water works, contractor to guarantee 200,000 gallons daily, for \$7500.

Raleigh—Mercantile.—W. O. Shepherd and others have incorporated the Citizens' Co-operative Co., capital stock \$30,000, to conduct a grocery business. Address W. O. Shepherd, of the Citizens' Co-operative Co.

Salisbury—Electric-light Plant.—O. N. McAdoo, of Greensboro, N. C., has made a proposition for the installation of an electric-lighting plant in Salisbury.

Washington—Tobacco Manufacturing, etc. Chartered: The Pamlico Tobacco Co. has been incorporated with a capital stock of \$50,000 by Thomas P. Howard, A. W. Styron and E. W. Ayres. The business proposed is the manufacture of smoking tobacco. Address Thomas P. Howard, of the Pamlico Tobacco Co.

Winston—Fertilizer Factory.—Incorporated: The Southern Chemical Co., to erect and operate a large fertilizer factory. The capital stock is to be \$100,000, with privilege of increasing to \$500,000. H. B. Battle, of Raleigh; P. H. Haynes and W. T. Brown, of Winston, and F. H. Fries, of Salem, are among the incorporators. Address F. H. Fries, of the Southern Chemical Co., Salem, N. C.

SOUTH CAROLINA.

Aiken Junction—Kaolin Mining, etc.—Charles W. Davis is forming the Mutual Mining & Manufacturing Co. for the purpose of developing kaolin lands near Aiken Junction. Address Mr. Davis, care of Warren Manufacturing Co., Graniteville, S. C.

Charleston—Ice Factory and Cold-storage Plant.—The proposed new ice plant, already referred to in these notes, will be built at once. Charter has been applied for under the title of the Mutual Ice Manufacturing & Cold Storage Co., with capital stock of \$100,000, the incorporators being Wm. A. Wheeler, of Cincinnati, O.; Thomas L. Bayne, of New Orleans, La.; A. S. Treadwell, of Boston, and J. E. Burke, of Charleston, S. C. The last-named can be addressed.

Columbia—Bridge.—The Columbia Mills Co. contemplates the construction of a bridge for passengers and light vehicles across the Congaree river. Plans are prepared.

Greer Depot—Grist Mill, etc.—The Brooks Manufacturing Co. has put in a grist mill, and may put in batting machinery.

Pelzer—Broom and Mattress Factory.—Chartered: The Dexter Broom & Mattress Co., capital stock \$2000; Ellison A. Smyth, president; James L. Brown, treasurer and manager; J. M. Clles, T. J. Martin and I. W. Cox, directors.

Union—Water Works and Electric-light Plant.—Contract for erection of city electric-light plant let to the Fort Wayne Electric Co., of Fort Wayne, Ind., at \$7975, and for the water works to Guild & White, of Chattanooga, Tenn., at \$24,800.

Spartanburg—Ice Factory.—It is reported that a \$25,000 ice factory will be erected, but no names are yet made public in connection with the proposed enterprise.

TENNESSEE.

Dickson—Handle Factory.—A. H. Leathers, of Pennsylvania, is contemplating the erection of a handle factory at Dickson. Address Mr. Leathers, care of the Adams House.

Gallatin—Water Works.—The city authorities have taken under consideration the establishment of water works. A committee, composed of J. W. Blackmore, R. Beebe and Capt. W. H. Spradlin, has been appointed to investigate.

Nashville—Telephone System.—The Southern Telephone Co., to which franchise was granted last week, will establish a system and exchange of 3000. Work of construction will begin within sixty days. J. G. Paty, secretary, can be addressed for further information.

Nashville—Lumber Mills.—John B. Ransom & Co. will rebuild their burned lumber mills.

Tullahoma—Bending Works.—M. R. Campbell will establish a bending works, not a carriage factory, as has been stated.

TEXAS.

Commerce—Water Works.—The city is about to arrange for the construction of its water works. W. W. Rutland, president Commerce Improvement Co., can be addressed.*

Dallas—Marble Works.—Chartered: The Davoren-McKee Marble Co., for manufacturing monuments and other articles out of marble; incorporators: A. H. Middleton, P. L. Burney and William McKee; capital

stock \$5000. Address William McKee, the Davoren-McKee Marble Co.

El Paso—Machinery Works, etc.—Chartered: The Fundicion de Hierro de Torreon of Torreon, Mexico, and El Paso, Texas, to manufacture, buy, sell and repair machinery, etc.; capital stock \$10,000; incorporators: W. N. Small, J. D. Groesbeck, J. C. Lockland, Millard Patterson and J. A. Kerr, all of El Paso, Texas.

McKinney—Water Works.—T. T. Emerson and H. C. Herndon, the council committee on water works, are now investigating such systems, preparatory to submitting report for McKinney's proposed system.

VIRGINIA.

Newport News—Ship-yards, Armor-plate Plants, etc.—Reports are in circulation, similar to previous ones of the same import, stating that Collis P. Huntington, of New York, president of the Newport News Ship Building & Dry Dock Co., is negotiating the sale of his company's yards to Armstrong, Whitwell & Co., of Newcastle-on-Tyne, England. Indications seem to point to a possible completion of such a deal, and in the event that it should be completed, the present yards would be enlarged and armor-plate works, ordnance factory, etc., would be added.

Norfolk—Novelty Factory.—Chartered: The Brosnan & Dunn Co., to manufacture wooden, paper, celluloid, rubber, cloth, leather, glass and metal goods and novelties. The capital stock is to be from \$30,000 to \$50,000; officers, Barton Myers, of Norfolk, president; W. J. Dunn, of Chicopee Falls, Mass., vice-president; C. J. Brosnan, of Springfield, Mass., treasurer and general manager, and F. M. Killam, of Norfolk, secretary. These, with Alfred Clay, W. A. Wrenn and V. P. Snow, of Norfolk, are directors. George C. Moser is making plans for the company's new factory at Lambert's Point, which is to be begun shortly. Several hundred persons will be given employment. The factory is being removed from Springfield, Mass., by Messrs. Brosnan & Dunn, as recently reported.

Richmond—Amusement Company.—Chartered: The Fair Grounds Co., to lease and improve land, and especially that tract known as the Fair Grounds, etc. The company's capital stock is to be not less than \$50,000 or more than \$200,000; president, John L. Williams; secretary and treasurer, E. Randolph Williams.

Richmond—Spike Works.—The Richmond Standard Spike Works will resume operations, with 100 men at work.

Richmond—Beet-sugar Factory.—Reports have been revived regarding the contemplated beet-sugar factory, recently noted. Ware B. Gay and James B. Pace are both said to be interested and can be addressed for information. Also said to be interested is O. K. Lapham, of Staunton, Va.

Richmond—Gold Mines.—Chartered: The Rivanna Gold Mining Co., for mining and refining ores, etc., with capital stock of \$500,000; president, Thomas A. Darby, of Palatka, Fla.; vice-president, George A. Taber, of Richmond; secretary and treasurer, W. J. Winegar, of Richmond; directors—the above and Messrs. D. W. Allen, Pueblo, Col.; John P. Crowell, Westbury, N. M., and F. P. Mercorean, Pueblo, Col. Address W. J. Winegar, secretary-treasurer, of the Rivanna Gold Mining Co., Richmond.

Virginia—Woodworking Factory.—The Bedford Handle & Hardware Co., of Bedford, Pa., contemplates the establishment of a factory in the South, and will probably locate it either in Virginia or North Carolina.

WEST VIRGINIA.

Charleston—Construction Company.—Chartered: The Western Construction Co., for the purpose of doing all kinds of government and municipal contracting, improving rivers and harbors and contracting locks and dams. Frank M. Thomas, of Buffalo, and D. B. Truax and Nehemiah Martin, of Hastings, Minn., are the incorporators.

Charleston—Oil Wells.—Dr. D. Mayer, Philip Frankenberger and A. E. Mahone, of Charleston, W. Va., and C. A. Curran, of Louisville, Ky., have organized a company, with \$50,000 authorized capital, to bore for oil near Charleston. Address Dr. D. Mayer, Charleston, for information.

Fairmont—Machine Works.—Incorporated: The Fairmont Machine Co., with an authorized capital of \$50,000. The stockholders are J. E. Watson, J. M. Hartley, J. J. Chisler, C. S. Smith and J. E. Devder, all of Fairmont. Address J. E. Watson, of the Fairmont Machine Co.

Fairmont—Water Works.—A charter has been issued to the West Fairmont Water Co., with an authorized capital of \$50,000.

The company is organized for the purpose of supplying water to West Fairmont and other cities and towns in Marion county. The incorporators are J. F. Watson, W. T. Ravenscroft, B. D. Fleming, Glenn F. Barnes, L. N. Yost and C. L. Martin, all of West Fairmont.

Huntington—Lumber Mills.—Newman & Spanner, of Ironton, O., whose \$250,000 lumber mills were burned recently, will probably rebuild at Huntington or at Central City, near Huntington. The Chamber of Commerce of Huntington is endeavoring to locate the plant. Address Newman & Spanner, lumber millers, Ironton, O.

Parkersburg—Gas Company.—Chartered: The Southern Ohio Gas Co., capital subscribed \$7000, by Jesse Finsterwald and others, of Athens, O.

Preston County—Coal Lands.—A report says that J. A. Hastings and I. R. Johnson, of Pittsburg, Pa., are negotiating for 10,000 acres of coal land in Preston county.

West Union—Water Works.—The proposed water works will doubtless be arranged for in the near future; population is 600. S. P. Smith, recorder, can be addressed.

Wheeling—Enamel Works.—Chartered: The Enterprise Enamel Co., to manufacture brown ironware, steel hollowware and other ware. The subscribed capital is \$10,000, and the authorized capital \$100,000. The stockholders are Theodore Rosshack, C. L. Dorer and James F. Dubois, of Belaire, O., and F. F. J. Caldwell and C. A. Schaeffer, of Wheeling. For information address the last-named.

Wheeling—Metal-roofing Works.—The Caldwell & Peterson Manufacturing Co., metal roofers, will erect a new factory building of structural iron.

Wheeling—Amusement Company.—Chartered: The Belle Isle Park, with an authorized capital of \$200,000, for the purpose of conducting pleasure ground, with suitable buildings and structures, etc. The incorporators are Henry Schmulbach, A. M. Hamilton, W. E. Stone, B. W. Peterson, Michael Loftus, W. A. Shirley, H. W. McLure, J. H. Lancaster, Morris Horkheimer and E. W. Schafer, of Wheeling, and W. W. Hazzard, of Cleveland, O.

BURNED.

Arcola, Miss.—Cotton gin of J. S. Johnson, Sr.

Atlanta, Ga.—Excelsior factory of Atlanta Excelsior Works; loss \$50,000.

Baltimore, Md.—Pants factory of Jacob Schoeneman, at 208 West Baltimore street; loss \$25,000.

Berea, Ky.—Saw mill, grist mill, etc., of John Blazer, at Scaffold Cane, P. O. Berea, Ky.

Clinton, Mo.—Massay Bros.' cotton gin.

Coakley, N. C.—Cotton gin of J. D. Taylor.

Cumming, Ga.—Grist mill and gin of Webster Green; loss \$1000.

Denning, La.—Cotton gin of W. H. Freeman.

Doucett, Texas.—Nebraska Lumber Co.'s mills; loss \$20,000.

Durham, N. C.—Two dwellings of B. L. Duke, valued at \$12,000; warehouse of American Tobacco Co., two prize-houses of Geo. W. Watts, valued at \$7500, etc.

Hagerstown, Md.—Cannery of the Hagerstown Preserving Co.; loss \$2500. Factory of Hagerstown Woven Wire Mattress Co.; loss \$1300.

Maxton, N. C.—Maxton Iron Foundry and Wood Works; loss \$8000.

Pleasantgrove, Va.—Saw mill of I. N. Eason.

Rockdale, Texas.—Rockdale Improvement Co.'s water and electric-light works, gins, etc., badly damaged by explosion; loss \$15,000.

St. Louis, Mo.—Flour mill of E. Godard Milling Co.; damaged to extent of \$25,000.

Tampa, Fla.—Troy Steam Laundry, Ybor City Ice Works, etc.; loss \$40,000.

Toulon, Tenn.—Cotton gin of Moses Savage.

Waynesboro, Miss.—Turpentine plant of R. W. Jugan & Co.

West Point, Miss.—Cotton gin of Dr. L. Love Crump.

BUILDING NOTES

Baltimore, Md.—Dwellings.—Permit issued to Daniel Donnelly, of 141½ East Chase street, for erection of nineteen two-story dwellings.

Birmingham, Ala.—Dwelling.—William A. Walker has let contract to Evans Bros. for

the erection of a dwelling to cost \$10,000.

Charlotte, N. C.—Apartment House.—S. Wittkowsky contemplates the erection of an apartment house.

Chattanooga, Tenn.—Reformatory.—The county court has appropriated \$10,000 to establish a reformatory. Address Dr. J. W. Bachman.

Eastlake, Ala.—Armory.—The Huey Guards will build an armory building. Address Captain Huey Guards.

Jonesboro, Ga.—Courthouse.—The county commissioners will order an election to vote on bonds for the construction of a courthouse.

Lonaconing, Md.—Bank Building.—Henderson & Smith, of Cumberland, Md., have contract to erect in Lonaconing a bank and merchandise building for David Sloan, of Lonaconing.

Louisville, Ky.—Hotel.—The French Lick Springs Co., John C. Howard, secretary, will build a brick hotel building, to cost about \$100,000. Plans and bids will be arranged for at once.

Nashville, Tenn.—Depot.—The Louisville & Nashville Railroad Co. will build a freight depot 40x225 feet in dimension; J. G. Metcalfe, general manager, Louisville, Ky.

New Orleans, La.—Hotel.—Thomas Nicholson, builder, has leased building which he will remodel and convert into a hotel.

Norfolk, Va.—Public Building.—The Secretary of the Treasury, Washington, D. C., has approved the plans prepared by Wyatt & Nolting, of Baltimore, Md., for the proposed new public building for Norfolk. The structure is to cost \$180,000.

Pensacola, Fla.—City Hall, etc.—The city contemplates the erection of a city hall and market-house, to cost from \$30,000 to \$35,000. Address F. Glackmeyer, city clerk.

Portsmouth, Va.—Warehouses, Bridge, etc. In connection with the construction of the Belt Line there will be warehouses, wharves, bridge, etc., at a cost of about \$350,000. For information address A. J. Cassatt, president, New York, Philadelphia & Norfolk Railroad, 28 South Fifteenth street, Philadelphia, Pa.

Raleigh, N. C.—Alumni Building.—Contract for erection of alumni building for State University has been awarded to Nicholas Ittner, of Atlanta, Ga., at \$5940 for the stone work and foundation.

Ridgely, Md.—Roundhouse.—The Piedmont & Cumberland Railway Co. will build a roundhouse of fourteen stalls at Ridgely; Henry G. Davis, president, Baltimore, Md.

Sedalia, Mo.—Car Shops, etc.—A. A. Allen, general manager Missouri, Kansas & Texas Railroad, has awarded contract to J. A. Dady, of Nevada, Mo., at about \$80,000, for the erection of eighteen separate buildings, which are to be equipped by the railway for car shops, coach shops, etc.

Springfield, Mo.—Church.—Benton Avenue M. E. Church will build a new structure to cost \$20,000. Plans have been prepared by Architect Heckenlively.

Washington, D. C.—Dwellings, etc.—Louis O. Tompkins will erect two dwellings after plans by A. B. Morgan; Rosalia Maxley will erect two brick houses; Appleton P. Clark, Jr., is preparing plans for rectory building for Rock Creek Church; L. H. Carter & Sons will erect a store and dwelling for J. E. Lacey; James G. Hill is preparing plans for the remodeling of dwelling into apartment-house; C. H. Gladden has prepared plans for five two-story dwellings.

RAILROAD CONSTRUCTION.

Railways.

Anniston, Ala.—It is reported that the scheme of building a railroad from Anniston to the Coosa coalfields and a connection with the Alabama Great Southern road has been revived. Among those mentioned as interested in the project are Samuel Wallace, of Minneapolis, Minn.; W. G. Ledbetter, of Anniston, and English parties.

Baltimore, Md.—It is reported that a Northern syndicate is considering a plan to build a railroad line from Reading, Pa., to a point on the Chesapeake bay where deep water can be obtained. It is stated that the railroad will be built for the purpose of carrying iron ore and coal to a town to be established at the tidewater terminus of the road.

Baltimore, Md.—It is reported that Messrs. J. P. Morgan & Co., of New York, are negotiating to purchase the Columbia & Maryland Electric road, with the view of completing it between Washington and Baltimore, and operating it by steam power. The road is nearly finished between Balti-

more and Ellicott City, and is ready for operation for a distance of about ten miles outside of Washington. James Bond and T. Edward Hambleton, of Baltimore, are receivers of the road.

Bear Springs, Tenn.—John H. Lory, general manager of the Tennessee & Cumberland River Railroad Co., advises the Manufacturers' Record that it is expected to have this line in operation by January 1. Its name has been changed from the Tennessee Northern to the title referred to. Rails and rolling stock have been secured for the line.

Beaumont, Texas.—The Beaumont Wharf & Terminal Co., it is reported, has constructed one mile of its line, which is to be eight and one-half miles in length. W. W. Wilson, of Beaumont, is vice-president of the company.

Chattanooga, Tenn.—The plan to build a railroad line to Lookout mountain has again been taken up, and it is stated that surveys are about to be made. J. T. Crass is one of those interested.

Chattanooga, Tenn.—The Chattanooga parties, it is reported, may have an electric line between Chattanooga and Chickamauga Park. The tracks of the Chattanooga, Rome & Southern Railroad will be used, and electric equipment placed on them. A Mr. Penock, of Chattanooga, is interested.

Chattanooga, Tenn.—The scheme to build an electric railroad on Lookout mountain has resulted in the formation of a company, with J. T. Crass, president, and J. P. Sanborn, vice-president. It is stated that the road is to be built within the next year.

Cordele, Ga.—It is reported that the Augusta Southwestern Railroad Co. has let contracts for an extension of its line to Cordele, where it will make a connection with the Albany & Northern road, which will give it a terminus at Albany, Ga. James U. Jackson, of Augusta, Ga., is president of the company.

El Paso, Texas.—It is reported that the New Mexico Railroad & Coal Co., which is promoting a line between El Paso and the coalfields of New Mexico, has determined to begin construction work immediately. The road is to be 105 miles in length. The officers of the company are as follows: C. D. Simpson, of Scranton, Pa., president; Chas. B. Eddy, of Eddy, N. M., vice-president, and B. S. Harmon, of New York, secretary.

El Paso, Texas.—President C. D. Simpson, of the New Mexico Railway & Coal Co., advises the Manufacturers' Record that it is proposed to begin the construction of the railroad between El Paso and the coal fields near White Oaks, New Mexico, as soon as permanent surveys have been made. The address of the company is Room 174, 66 Broadway, New York.

Mocksville, N. C.—It is reported that the Southern Railway Co. has determined to build an extension between Mocksville and Mooresville, a distance of twenty-seven miles, and has let contract to T. P. Jones & Co. Frank S. Gannon, 1300 Pennsylvania avenue, Washington, D. C., is vice-president of the railroad company.

Parkersburg, W. Va.—It is reported that seven miles of the Little Kanawha Railroad has been completed, and that the track-laying is now progressing upon the second section of eighteen miles. The line will probably be ready for operation its entire length by January 1. The Kanawha Construction Co. is general contractor for the line.

Pickens, S. C.—It is reported that the scheme of building the Pickens & Easley Railroad, already reported in the Manufacturers' Record, has been revived, and that Charleston parties are interested in the matter. This line, if built, will be about seven miles long. J. A. McCullough, of Greenville, S. C., is reported as interested, also Hon. J. G. Evans, of Aiken, S. C.

Portsmouth, Va.—Work has commenced on the Belt Railroad line in the suburbs of Portsmouth. It is calculated that this road will cost about \$500,000, including terminals. It will connect with the principal railroad lines within Portsmouth, and is being promoted by the New York, Philadelphia & Norfolk Railroad Co., of which A. J. Cassatt, of Philadelphia, Pa., is president.

Selma, Ala.—It is reported that the Atlanta & Alabama Railroad Co. has let contract for the building of its line to the Erie Construction Co., which will be the principal contractor. The road is to be built between Atlanta and Selma, a distance of 190 miles. It is understood that the first portion of the road will extend from Selma into Augusta county, Ala. R. M. Mitchell, of Atlanta, is president of the company, and W. H. Tisdale, of Selma, vice-president.

Sweetwater, Texas.—The Colorado Valley Railroad Co., it is reported, has graded twenty-six miles of this line and laid six miles of track. Irvin Wheatcroft, at Sweetwater, is president of the company. The Toledo Construction Co., of Toledo, O., is doing the work.

Washington, D. C.—Chief Engineer L. H. Hyer, of the Chesapeake Bay Construction Co., advises the Manufacturers' Record that in addition to the contract for grading the Washington & Chesapeake Beach Railroad a contract for supplying ties has been let to Messrs. Homes & Elkins, of this city.

Windsor, N. C.—A correspondent of the Manufacturers' Record states that the Wellington & Powellville Railroad Co. is operating a line from Windsor to Ahsokie, a distance of about twenty-five miles. It will connect with the Atlantic Coast Line at the latter place. A portion of the trestle work has already been constructed, and it is expected that the entire line will be completed early in 1898.

Woodburn, Ga.—It is reported that the parties who recently purchased the Cuyler & Woodburn Railroad have determined to extend the line to Statesboro, Ga., as originally intended. The extension will be about twenty-three miles in length. The railroad is now in operation between the towns mentioned a distance of thirteen miles. It is reported that Stilson Hutchins, of Washington, D. C., is one of the owners of the property at present.

Street Railways.

Baltimore, Md.—The Baltimore County Commissioners have given the Central Railroad Co. permission to extend its tracks in the eastern suburbs. The extension will be constructed immediately. It is understood that the Central and what is known as the Canton, Sparrow's Point & North Point Railroad Co. have combined, and the extension to North Point is to be constructed as soon as possible. George Blakiston, corner South and Lombard streets, is president of the Central Company.

Charleston, W. Va.—It is reported that the present owners of the Charleston Street Railway Co. have decided to begin improvements immediately. This, it is stated, will include the laying of heavier rails, also new cars and an extension of about two miles long in the suburbs. W. B. Carder is superintendent.

Pensacola, Fla.—The Manufacturers' Record is informed that the Pensacola Railroad & Terminal Co. has obtained an extension of time from the city authorities in which to complete its electric street-car line. This extension dates from November 1. W. H. Bosley, of Baltimore, is president of the company. Work is now in progress on the road.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressors.—See "Mining Equipment."

Beltting.—Wayne Cotton Mills, Goldsboro, N. C., wants bids on an engine belt for 300-horse-power engine, 31 inches wide and 100 feet long. Address W. K. Parker, general manager.

Boiler.—See "Mining Equipment."

Boiler and Engine.—See "Electric-Light Plant."

Boiler and Engine.—N. K. Jones, Box 620, Newport News, Va., wants boiler and engine suitable for wood-yard.

Boiler and Engine.—Scott & McKown, Sherman, Texas, will want in the near future a 150-horse-power boiler and 100-horse-power engine.

Boiler and Engine.—The Rockmart Manufacturing Co., Roy Teeters, secretary, Rockmart, Ga., wants prices on 60-horse-power boiler and engine.

Bridge.—A bridge will be constructed for railroad across White river, Ark., to have three fixed spans of 150 feet each and one

draw-span of 230 feet. For information address W. B. Worthen, Little Rock, Ark.

Clothing-factory Equipment.—The Piedmont Clothing Manufacturing Co., of Charlotte, N. C., is in the market for a plant to make 500 pairs of pants daily. Estimates should be made to Paul Shatham, secretary, Elkin, N. C.

Electric-light Plant.—The city of Bedford, Pa., will put in electric-light plant, with gasoline engine and electrical equipment for forty arc lights of 2000 candle-power. Address George Points, secretary of council.

Electric-light Plant.—The town of Quincy, Fla., will probably buy an electric-light plant of twenty 2000-candle-power arc lights and 600 incandescent lights. Address W. M. Corry for information.

Electric-light Plant.—Dr. G. W. T. Hannah, Thomaston, Ga., wants information and prices on electric-lighting equipment; probably will want 100-horse-power dynamo and 200-horse-power dynamo, insulated wire for power and light three miles distant from plant, etc.

Electric-light Plant.—The city of Cumberland, Md., will open bids November 15 for the furnishing of all labor and material for a municipal electric-light plant, in accordance with plans and specifications now on file in the office of the city clerk; latter also on file in office of Frank B. Rae Engineering Co., 134 Monroe street, Chicago; Walter B. Clark, city clerk.

Electric-light Plant.—Wanted—Prices on new and second-hand 60-horse-power engine, 75-horse-power boiler, 600 or 750 and 1000-light alternator, 2000 pounds No. 6 wire, 1000 pounds No. 8 and 500 pounds No. 12 wire, weatherproof. Address Light Plant, 2424 Q¹/₂, Galveston, Texas.

Foundry Machinery.—See "Machine Tools."

Gas Machine.—Rev. S. R. Andrew, Middletown, Va., wants circulars and prices on gas machines suitable for lighting church.

Gasoline Engine.—See "Electric-light Plant."

Heating Supplies.—The Mills Manufacturing Co., Greenville, S. C., is in the market for 200 cheap grates for operatives' cottages, 16-inch grates; plain and cheap will answer.

Ice Factory.—The town of Quincy, Fla., will probably buy an ice factory of five tons daily capacity. Address Wm. M. Corry for information.

Irrigation-system Equipment.—F. C. Davie, Fort Meade, Fla., wants information on irrigation systems and estimates on cost of equipment.

Lathe.—Roy Teeters, Rockmart, Ga., wants prices on lathe for stone work.

Lighting Apparatus.—See "Gas Machine."

Logging Equipment.—Niemeyer & Daragh Shingle Co., Little Rock, Ark., wants to buy a second-hand steam log skidder and a small second-hand locomotive, standard gauge, and one and a-half miles of T rails, with fish plates, spikes, etc.

Logging Equipment.—W. L. Whitfield, Live Oak, Fla., wants to buy a strong, durable and simple stump-puller.

Machine Tools.—John G. Sanders, Monroe, La., is in the market for a small shaper, ten to sixteen inches, new or second-hand.

Machine Tools.—The Lack Singletree Co., Paducah, Ky., F. E. Lack, president, will be in the market for power drills, anvils and other blacksmith tools.

Machine Tools.—The Union Iron Works, Columbus, Ga., wants prices and designs of pulley-molding machines.

Machine Tools.—Hautbman & Loeb, P. O. Box 460, New Orleans, La., want to buy the following machinery, new or second-hand, but if latter must be in perfect condition and of latest-improved makes: Lathe, 32 inches by 10 feet; lathe, 17 inches by 9 feet; turret lathe, 32 inches; pattern-makers' lathe, 24 inches; drill press, 40-inch swing; drill press, 20-inch swing; shaper, 10x10 inches by 15 inches; bolt cutter, 3/4-inch to 1 1/2 or 2-inch; emery grinder and buffer, pipe-cutting and thread machine, 1/4 to 2 1/4-inch; pipe-cutter and threader, 3 to 8-inch or 10-inch; boring tool, 8 inches, and boring tool, 10 inches.

Mattress Machinery and Supplies.—The Oriental Co., of Dunn, N. C., is in need of machinery to coil mattress springs, upholstery springs and woven wire; also wants material used.

Metal-working Machinery.—Thomas B. Peirce, Warsaw, N. C., wants to buy a power press, with dies for cutting and punching tin, for corners of berry crates.

Mining Equipment.—The Sloss Iron & Steel Co., Sol Haas, president, Birmingham,

Ala., is in the market for air compressors, pump and boiler.

Pants Manufacturing Machinery.—See "Clothing-factory Equipment."

Pump.—See "Mining Equipment."

Quarrying Machinery.—Roy Teeters, Rockmart, Ga., wants prices on machinery for sawing, cutting and dressing slate, also lathe.

Railway Equipment.—See "Logging Equipment."

Saw-mill Equipment.—Johnson Bros., Pineville, Ky., want to buy good second-hand Allis carriage, 54-inch, and light steam feed.

Sewing Machines, etc.—See "Clothing-factory Equipment."

Stump-puller.—See "Logging Equipment."

Sugar Mills.—J. P. Wall, Putnam Hall, Fla., wants to buy a three-roller sugar mill.

Tinworking Machinery.—See "Metal-working Machinery."

Water Works.—See "Well-drilling."

Water Works.—The city of Commerce, Texas, wants estimates on the construction of water works. Address W. W. Rutland, president Commerce Improvement Co.

Well-drilling.—The town of Macon, Miss., wants to contract for the drilling of an artesian well. Address the mayor.

Woodworking Machinery.—Locher & Co., Glasgow, Va., want good second-hand lathes for handle work, spokes and whiffletrees (Ober make preferred).

Woodworking Machinery.—Geo. W. Hart, Niblett's Bluff, La., is in the market for barrel hoops, spoke and handle machinery, and possibly heading machinery later on. New or second-hand machinery will do.

Woven-wire Machinery.—See "Mattress Machinery."

Technological Laboratory.—It has been found necessary to establish a laboratory of tests and technology connected with the Philadelphia Museums on account of the constant receipt of various raw products which must be analyzed and studied in order to show their availability for American manufacture. One of the most important parts of the museums' work at the present time is the laboratory for the conditioning of wools, silks and other fibres. This has been established in harmony with the official system in vogue in England, France and Germany, with special purpose of supplying wool and other merchants and manufacturers with the means of determining the exact quality and condition of the wools and fibres which they use. There is no laboratory of similar character in this country. It is hoped to widen its use throughout the United States. A pamphlet of the new department is now ready.

A New Through Passenger Route for Colorado, Utah and California.

The Chicago Times-Herald of August 27 says that on September 12 the new traffic alliance between the Chicago, Milwaukee & St. Paul Railway and the Chicago, Rock Island & Pacific Railway goes into effect, and on that date the former will send its first Denver sleeper out of Chicago. This will be attached to its regular night train for Omaha, and will be delivered there to the Rock Island. On October 2 the tourist car route over these two lines, the Colorado Midland and Southern Pacific, will be inaugurated. Tourist cars will be run once a week between Chicago and San Francisco. For further details regarding this new route call on or address Geo. H. Heafford, general passenger and ticket agent Chicago, Milwaukee & St. Paul Railway, 410 Old Colony Building, Chicago, Ill.

The Book of the Royal Blue.

The "Book of the Royal Blue," issued by the Passenger Department of the Baltimore & Ohio Railroad, has made its initial appearance with the October number, and is, undoubtedly, the most creditable magazine of its nature published. Aside from being a model example of modern typography, it is most interesting as to its contents. A field for interesting literature is certainly offered by the Baltimore & Ohio Railroad, because it is the oldest railway in the United States; is foremost in historical prominence, and is rich in magnificent scenery. The latter especially affords an endless scope for illustrations, and the magazine has started on its venture with all these points full in hand.

Copies can be obtained by enclosing four cents in stamps to the Advertising Department, Baltimore & Ohio Railroad, Baltimore, Md.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

No advertisements but those of a financial character will be accepted for this page.

High Price for Southern Bonds.

The issue of bonds made recently by Raleigh, N. C., has been sold to Messrs. Eastabrook & Co., of Boston, at the remarkably high price of 109.327. Bidders were present from Cincinnati, Baltimore, New York, Cleveland and other cities. Many of the bids ranged from 106 to 109. These bonds bear but 5 per cent. It is believed to be the highest price ever paid for any similar securities south of Baltimore. This is an indication of the high standing of the city of Raleigh among investors.

New Corporations.

S. R. Nuzens and others have organized the Fairmont Loan & Trust Co. of Fairmont, W. Va.

Charles E. Tips, G. A. Vaughn and others have organized the First National Bank of Seguin, Texas.

The Royal Fire Insurance Co. has been incorporated at Baltimore by John J. Wisner, Joseph B. Dunn and others.

The Security Investment Co. has been formed at Jacksonville, Fla., with \$5000 capital, by John D. Baker, P. D. Cassidy and others.

The Equitable Building & Loan Co. has been organized at Daytona, Fla., with \$10,000 capital, by Lawrence Thomas, H. B. Shaw and others.

The Dillon Banking Co. has been formed at Dillon, S. C., by Allen Edens, of Eckels, N. C.; B. Stackhouse, of Dillon, and others. The capital stock is to be \$25,000.

The Fidelity Loan and Savings Association of Baltimore has been organized by Edward A. Gault, Robert W. Owens, Wm. A. Mason and others, with a capital of \$2,000,000.

New Securities.

It is reported that the city council of Huntsville, Tenn., will issue \$10,000 in bonds for improvements.

Messrs. N. W. Harris & Co. have been awarded the issue of \$200,000 worth of 5 per cent. funding bonds issued by Galveston, Texas.

L. K. Proctor, Jr., mayor of Lumberton, N. C., will receive bids until November 1 for \$11,000 worth of 5 per cent. improvement bonds.

The receivers of the Home Telephone Co. of Baltimore have applied to the court for permission to issue \$30,000 in 6 per cent. receivers' certificates.

The city of Danville, Va., will receive bids until October 25 for \$50,000 worth of 5 per cent. refunding bonds. The mayor will give further information.

The city council of Westport, Mo., has decided to issue \$11,900 worth of 5 per cent. bonds to pay a municipal debt. The mayor will give further information.

The town of Milan, Mo., has determined to issue \$18,000 worth of 5 per cent. bonds for electric lights and water works. The mayor will give further information.

It is reported that the Beattyville Land Co., of Louisville, Ky., is considering the issue of \$10,000 in bonds to refund its floating debt. H. N. Gifford is president of the company.

It is reported that Glen Cove Springs, Fla., has determined to issue \$50,000 worth of bonds, which will probably be placed on the market in the near future.

TABLE OF CONTENTS.

EDITORIAL:	Page.
Birmingham an Example.....	103
Southern Breadstuff Exports.....	103
A Practical Monument.....	103
New York Now Alert.....	103
Negroes Studying Themselves.....	103

The Armor-Plate Board.....	104
To Show Florida Tobacco.....	104
Sheep Culture in America.....	104
Literary Notes.....	195, 201

RAILROAD NEWS:	Page.
Future of the Columbia & Maryland.....	195
Charleston's City Railway.....	195
A Texas Project.....	195
Railroads in Alabama.....	195
From Atlanta to Selma.....	195
Railroad Annual Meetings.....	195
Interstate Commission's Report.....	195
An Important North Carolina Line.....	196
Chattanooga Southern Improvements.....	196
Railroad Notes.....	196
Coast Country Riches.....	196

TEXTILES:	Page.
English Cotton Mills.....	196
The Cotton Crop.....	197
North Carolina Mills.....	197
Textile Notes.....	197
Sale of West Virginia Lands.....	197

COTTONSEED OIL:	Page.
The Market for Cottonseed Products.....	197
Cottonseed-Oil Notes.....	197
Activity at Harmony Grove.....	197
Proposed Beet-Sugar Factory.....	197
A Large Contract.....	197

PHOSPHATES:	Page.
Phosphate Markets.....	198
Phosphate and Fertilizer Notes.....	198
Advantages Over Chicago.....	198
Atlanta's 800-Barrel Flour Mill.....	198

LUMBER:	Page.
Lumber Market Reviews:	
Baltimore.....	198
Norfolk.....	198
Charleston.....	198
Savannah.....	198
Mobile.....	199
Lumber Notes.....	199
Iron Market.....	199
The Nicaragua Canal.....	199

MECHANICAL:	Page.
Hand Planer and Joinder (illus.).....	200
Heavy Four-Sided Moulder (illus.).....	200
The Samson Belt Fastener (illus.).....	201
Trade Notes.....	201
Trade Literature.....	201

CONSTRUCTION DEPARTMENT:	Page.
New Enterprises.....	202
Building Notes.....	203
Railroad Construction.....	203
Machinery Wanted.....	204

FINANCIAL NEWS:	Page.
High Price for Southern Bonds.....	205
New Corporations.....	205
New Securities.....	205
Dividends and Interest.....	205
Financial Notes.....	205

H. A. Bemiss, treasurer, may be addressed.

The issue of \$50,000 of the 6 per cent. bonds to be issued by the city of Spartanburg, S. C., will probably be placed on the market in December. The mayor will give further information.

Relative to the bond issue to be made by the city of Danville, Va., \$50,000, bids will be received by J. H. Schoolfield until October 25. The bonds bear interest at the rate of 5 per cent.

It is reported that Summers county, West Virginia, will decide upon the issue of \$20,000 in bonds at an election to be held November 9. The county clerk may be addressed at Hinton, W. Va.

Dividends and Interest.

The Commonwealth Bank of Baltimore has declared a dividend of 2 per cent.

The Norfolk & Western Railroad Co. has declared a dividend of 1 per cent. on its preferred stock.

The Masonic Temple Association of Galveston, Texas, has declared a dividend of \$1 per share.

The New Orleans & Carrollton Railroad Co. has declared a quarterly dividend of \$1.50 per share.

Financial Notes.

W. F. McCauley has been elected cashier of the Chatham Bank of Savannah.

S. Waddell has been appointed president, and L. S. Parks, cashier, of the First National Bank of Union City, Tennessee.

D. S. Williams has been appointed

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DIRECTORS:

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Stephen H. Emmens, Pres. of the Mining and Industrial Exchange, New York City.
R. E. Lyon, of Baltimore, Md.
L. D. Hearitt, Cashier First National Bank, Durham, N. C.
H. B. Tilden, of Baltimore, Md.

The stock of this company has been listed on the New York Mining and Industrial Exchange. The office of the company is at 849 Equitable Building, Baltimore, Md.

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The company does not care to sell in small lots, but will be glad to confer with investors with reference to the purchase of large blocks. The officers feel confident that the facts to be presented concerning the company's property will appeal to the best informed and most conservative and cautious investor.

If you wish to keep posted on the progress of the South, read the Manufacturers' Record. Price \$4.00 a year.

Alphabetical Index of Advertisers.

For "Classified Index" see pages 3, 5 and 7.

A Abbe, M. F. 35 Acme Malleable Iron Works. 13 Adams, George S. 25 Adams, William H. 6 Ahrens & Ott Mfg. Co. 15 Alton & Wood. 38 Alabama Bridge & Boiler Co. 8 Alabama Foundry & Machine Wks. 20 Albany Steam Trap Co. 9 Alber & Byrne. 6 Albro, E. D., Co. 22 Alexander Bros. 11 Alexander & McLaughlin. 2 Allen Anti-Rust Mfg. Co. 25 Allentown Hardware Works. 27 Alpha Paint & Mineral Co. 20 Alsing, J. R., Co. 34 American Cotton Oil Co. 30 American Diamond Rock Drill Co. 35 American Engine Co. 21 American Impulse Wheel Co. 33 American Ship Windlass Co. 15 American Supply Co. 29 Anderson, J., Jun. & Co. * Anderson Water, Light & Power Co. 21 Andrews, A. H., Co. † Andrews, Perry. 6 Angle Lamp Co. 38 Apollo Iron & Steel Co. 18 Armitage Mfg. Co. 25 Asheville Woodworking Co. 20 Atkins, E. C., & Co. 26 Atlanta Terra Cotta Co. 32 Austin Separator Co. 9 Austin White Lime Co. 6	C Carnell, George 22 Caroline Iron Works. 34 Carver Cotton Gin Co. 27 Case, J. I., T. M. Co. 16 Case Mfg. Co. 9 Castner & Curran. 8 C. & B. Line. 31 Central Expanded Metal Co. 25 C. G. 20 Channon, H., Co. 11 Chapman, Wm. A., & Co. 6 Chapman Valve Mfg. Co. 23 Charlotte Machine Co. 29 Chattanooga Fdy. & Pipe Works. 32 Chattanooga Machinery Co. 27 Chattanooga Steel Roofing Co. 24 Chesapeake Belting Co. 11 Chester Steel Castings Co. 13 Chicago Belting Co. 11 Chrome Steel Works. 13 Cincinnati Corrugating Co. 25 Cincinnati Elevator Works. 8 Cin., Hamilton & Dayton R. R. 31 Cincinnati Screw & Tap Co. 24 Clark, W. J., Co. 30 Clark, Jeremiah. 28 Clendenin Bros. 24 Climax Mfg. Co. 13 Clonbrock Steam Boiler Co. 15 Coburn Trolley Track Mfg. Co. 9 Cohoes Iron Fdy. & Mch. Co. 29 Cole, Wm. H., & Sons. 8 Commercial Electric Co. 37 Commercial Wood & Cement Co. 6 Committee on Drainage. 19 Contractors' Plant Mfg. Co., Ltd. 9 Cordesman Machine Co. 27 Cordesman, Meyer & Co. 26 Cornman Co. 21 Cortright Metal Roofing Co. 24 Cotton States Belting & Supply Co. 18 Covert Mfg. Co. 10 Cowley, E. A. 205 Cox & Sons Co. 12 Crompton & Knowles Loom Wrks. 4 Cronk Hanger Co. † Crosby Steam Gage & Valve Co. 15 Cruickshank, D. B. 21 Curtis & Marble Machine Co. 29 Cutler Mfg. Co. 25 Cypress Lumber Co. 9	G Gallagher, F. S. 20 Gallert, S. 20 Gandy Belting Co. 10 Garrett, C. S., & Son. 25 Gas Engine & Power Co. 9 General Electric Co. 29, 37 General Fire Extinguisher Co. 8 General Manager. 20 Gilbert, C. M., & Co. 6 Glaskin, George F., & Co. 6 Glen Cove Machine Co., Ltd. 26 Globe Machine Works. 17 Golden's Foundry & Machine Co. 23 Graphite Lubricating Co. 13 Grasty, Robt. Ware. 21 Gregory Co., C. E. 21 Grosse, L., Art Glass Works. 24	H Haines, Jones & Cadbury Co. 38 Haines, William S. 4 Hales & Ballinger. 6 Hanika, C., & Sons. 19 Harrill, L. 24 Harrington & King Perforat'g Co. 4 Hartford Steam Boiler Inspection & Insurance Co. 36 Hartley's Boiler Works. 15 Harvey, H. T. 20 Hascall Steam Generator Co. * Haubman & Loeb. 21 Hawes Mfg. Co. 21 Hayes, O. S. 20, 21 Help Wanted. 20 Hench & Dromgold. 27 Henderson, W. K. 22 Hendrick Mfg. Co., Limited. 8 Hickman, Williams & Co. 22 Hietz, Theo., & Son. 13 Hirsch, L. K. 22 Holmes, E. & B., Machinery Co. 27 Holmes Fibre Graphite Mfg. Co. * Holt, S. L., & Co. 21 Hoopes & Townsend. 21 Houston, Levi, Co. 27 Howard, B. C. 33 Humphreys Mfg. Co., The. 33 Huther Bros. † Hutton Engineering Co. 6	M McClave, Brooks & Co. 17 McCully, R. 34 McDonald, John, & Sons. 6 McDowell, Hamilton. 8 McFadden, Charles, Jr. 6 McGowan, John H., Co. 33 McKenna, David. † McLanahan & Stone. 35 Mead, V. A., Cycle Co. 8 Mecklenburg Iron Works. 18 Mercantile Trust & Deposit Co. 205 Merchants & Miners' Transp. Co. 31 Meres, C. R., & Heater Mfg. Co. 8 Meridian Machine Shops. 28 Meyer, Dr. Otto. 6 Michie Tobacco Co. * Middendorf, Oliver & Co. 205 Milburn, Frank P. 6 Miller Bros. & Co. 37 Mitchell Tempered Copper Co. 37 Mitschun, M., & Co. 22 Moore & McCrary. 6 More, Jones & Co. 13 Morae Twist Drill Mch. Co. 12 Morae, Williams & Co. 27 Mueller, H., Mfg. Co. 33 Mundt & Sons. 34 Munson Bros. 34 Murray, Dougal & Co. 28 Murray, James & Son. 34	N National Pipe Bending Co. 17 National Roofing & Supply Co. 25 New Atlantic Hotel. 22 New Columbus Bridge Co. 2 N. J. Car Spring & Rubber Co. 10 Newburg Ice Mch. & Engine Co. 16 Newport News Shipbuilding & Dry Dock Co. 14 New Process Rawhide Co. 10 New York Equipment Co. 22 New York Fireproof Covering Co. 4 Niagara Stamping & Tool Co. 25 Nicholson File Co. * Nurdyke & Marmon Co. 19 Norfolk & Western R. R. 8 Norfolk, Burnham & Co. 33 North American Metaline Co. 9 Norton Emery Wheel Co. 27 Nye & Trelick. 25
B Babcock & Wilcox Co. 15 Baeder, Adamson & Co. 13 Bailey-Lebby Co. 35 Bailey, John T., & Co. 18 Baily Mfg. Co. 37 Baird, U., Machinery Co. 12 Baldwin Locomotive Works. 13 Ball Engine Co. 9 Baltimore, Chesapeake & Richmond Steamboat Co. 31 Baltimore Engraving Co. 36 Baltimore & Ohio R. R. 31 Baltimore Storage & Light. Co. 31 Barber Asphalt Paving Co. 19 Barnes Mfg. Co. 32 Barnes, W. F. & John, Co. 8 Barnett, G. & H., Co. 38 Bates's, James, Sons. 8 Bay Line. 31 Beach, H. L. 27 Beckley, A. J., & Co. 35 Benjamin, O. P., Mfg. Co. 33 Berryman, James. 8 Bertsch & Co. * Besly, Chas. H., & Co. 38 Bethlehem Iron Co. 12 Big Four Route. 8 Big Union Mining Co. 205 Blitmore Estate. 22 Bird, Wm. M., & Co. 6 Birmingham Boiler Works. 8 Birmingham Mach. & Fdry. Co. 21 Black Mfg. Co. 37 Bliss Co., E. W. 24 Block-Pollak Iron Co. 22 Boomer & Boschert Press Co. 19 Boston Belting Co. 10 Boswell, W. C. 21 Bowdon, R. E. 6 Bowes, F. K. 21 Box 335. 20 Boyd, Jones & Co. 10 Bradford Detective Agency. 19 Bradford Mill Co. 12 Bradley Pulverizer Co. 35 Bradstreet Company. 8 Branson Machine Co. 28 Brooks, T. H., & Co. 24 Broomell, Schmidt & Co. 15 Brotherhood, F. 21 Brown, A. & F. 23 Brown Cotton Gin Co. 28 Brown Hoisting & Con. Mch. Co. 9 Brown, Lucius P. 6 Buckeye Engine Co. 14 Buckeye Iron and Brass Works. 28 Buffalo Forge Co. 38 Bureau of Freight and Transportation, Charleston, S. C. 18 Burgess, Chas. S. 20 Burt Labelling Machine Co. 23 Bushnell, G. H., Press Co. 28 Byers, Jno. F., Machine Co. 9	D Dallett & Co. 22 Davis-Farrar Co. 32 Davis Foundry and Mch. Works. † Davis, G. M., & Son. 9 Davis, Kelly & Co. 22 Dean Bros. Steam Pump Works. 32 De Kalb, Courtenay. 6 De Loach Mill Mfg. Co. 26 Dempwolf, C. H., & Co. 34 Derby, Henry. 20 Detroit & Cleveland Stm. Nav. Co. 31 Dietz, Schumacher & Boye. 12 Disston, Henry, & Sons. † Dixon, Jos., Crucible Co. 38 Dopp, H. Wm., & Son. 10 Dow Wire Works Co. 25 Draper Co. 18 Draper Machine Tool Co. 12 Dudley, T. J., & Son. 22 Dufur & Co. 25 Dunbar, R., & Son. 35 Dunning, W. D. 19	I Illinois Central Railroad. 31 India Alkali Works. 28 Ingersoll-Sergeant Drill Co. 18 International Corres. Schools. 6	J Jackson Mfg. Co. 23 Jeffrey Mfg. Co. 30 Jenkins Bros. 38 Jewell Belting Co. 11	K Kansas City, Pittsburg & Gulf R. R. 31 Keeler, E., Co. 8 Kelly, O. S., Co., The. 35 Kelly & Jones Co. * Kemper, C. E. 19 Kendrick Valve & Washer Co. 32 Keystone Crusher & Roller Co. 35 Keystone Drop Forge Co. 8 Kilbourne & Jacobs Mfg. Co. 38 Kilburn, Lincoln & Co. 28 Knowles Loom Works. 29 Knox, Henry E., Jr. 6 Kokomo Teleph'ne & Elec. Mfg. Co. 37	O Ober Lathe Co. 27 Otto Gas Engine Works. 16
E Easton Burnham Machine Co. 29 Eaton & Burnett College. 19 Eccles, S., Jr. * Eco Magneto Clock Co. 19 Empire Paint & Roofing Co. 25 Epping-Carpenter Co. 17 Etting, Edward J. 21 Eureka Fire Hose Co. 11 Everson, B. M. 21 Exchange Banking & Trust Co. 20	F Falls Rivet & Machine Co. 23 Farquhar, A. B., Co., Limited. 27 Fay, J. A., & Egan Co. 26 Fay Manila Roofing Co. 25 Fernandina Oil & Creosote Works. 22 Fidelity & Deposit Co. of Md. 19 Fisfield Tool Co. 12 Fitz-Hugh & Co. 22 Fogg, A. 22 Foss Gas Engine Co. 16 Foss Mfg. Co. 34 Forbes, W. D., & Co. 14 Forsyth, S. C., Machine Co. 26 Fort Wayne Electric Corporation. 37 Fossick Co., T. L. 6 Freese, E. M., & Co. * French, Saml. H., & Co. 24 Frick Co. 14 Froehling, Dr. Henry. 6 Fuel Economizer Co. 16 Fulton, John. 6 Fulton Steam Boiler Wks. & Fdry. † Furbush, M. A., & Son, Mch. Co. 28	L Lagonda Mfg. Co. * Lambert Gas & Gasoline Eng. Co. 16 Lambert Hoisting Engine Co. 14 Lane Manufacturing Co. 27 Lang, S. Logan. 20 Lefel, James, & Co. 33 Lehigh Valley Brass Works. 15 Leisenring Mfg. Co. 16 Leonard, Foley & Co. 6 Lewis, H. F., & Co., Ltd. 28 Lidgerwood Manufacturing Co. 9 Lightning Wage Calculator Co. 18 Link-Belt Engineering Co. 30 Loane, J. W. 36 Lobdell Car Wheel Co. 10 Lombard Iron Wks. & Supply Co. 9 Lorain Foundry Co. 13 Lowell Machine Shop. 28 Lowell Textile School. † Ludlow-Saylor Wire Co. 24 Ludlow Valve Mfg. Co. 23 Lunkenheimer Co. 38 Lyon, A. I. *	M Main Belting Co. 10 Makepeace, C. R., & Co. 6 Manistee Iron Works. 32 Marion Steam Shovel Co. 2 Martin, Hy., Brick Mch. Mfg. Co. 22 Maryland Mfg. & Construction Co. 36 Maryland Trust Co. 205 Mason Machine Works. 28 Mason Regulator Co. 33	P Pancoast, Henry B., & Co. 23 Pancoast Ventilator Co. 24 Patitz, A. M. * Paxson, J. W., & Co. 2 Peacock, George. 37 Pechin, T. E. 11 Peck-Hammond Co. * Penberthy Injector Co. 38 Perkins Mfg. Co. 22 Petite Machine Works. 29 Philadelphia Bourse. 9 Philadelphia Eng. Works, Ltd. 14 Phila. Machine Screw Works. 14 Philadelphia Steel Roofing Co. 25 Philadelphia Textile School. 19 Pierce-Crouch Engine Co. 16 Piqua Copying Machine Co. 10 Pittsburg Locomotive Works. 13 Pittsburgh Plate Glass Co. 25 Pittsburg Tool Steel Co. 18 Playford Stoker Co. 15 P. O. Box L. 20 Pomona Terra Cotta Co. 32 Pope Mfg. Co. 8 Porter, H. K., & Co. 13 Poulter & Co. 22 Powhatan Clay Mfg. Co. 25 Pratt, N. P., Laboratory. 6 Pratt & Whitney Co. 12 Pratt & Weir Chuck Co. 38 Price & Co. 22 Price & Heald. 22 Priestman & Co. 16 Providence Machine Co. 29 Pulsometer Steam Pump Co. 32	T Taylor, A. W., Land & Lumber Co. 21 Taylor, J. H. 22 Thomas Publishing Co. 24 Toledo Machine & Tool Co. 24 Toomey, Frank. 21 Trenton Iron Co. 18 Trevor Mfg. Co. 27 Tudor Boiler Mfg. Co. 15
C Cady, C. N. 38 Caldwell, H. W., & Son Co. 4 Calera Lime Co. 6 Cameron, A. S., Steam Pump Wks. 32 Cameron & Barkley Co. 35 Card Electric Co. 37 Cardwell Machine Co. 28 Carlin's, Thomas, Sons. 21	R Robinson & Orr. 22 Rossendale-Reddaway Belting & Hose Co. 11 Rowley & Hermance Co. 27 Ruger, J. W., & Co. 16 Russell & Co. 35	S Sabel Bros. 22 Safe Deposit & Trust Co. 205 Samson Steel Belt Hook Co. 18 Sanderson, John. * Santa Fe Route. 31 Saunders, D., Sons. 12 Schieren Chas. A., & Co. 11 Scott & Williams. 28 Seabury, Charles L., & Co. 9 Seidel, R. B. 4 Shaw, Willis. 27 Shawhan-Thresher Electric Co. 37 Sherwood, H. M. 20 Shultz Belting Co. 11 Siedler, C. 21 Simpson, H. P. 38 Simpson, J. S., & G. F. 34 Sinclair-Scott Co. 10 Sinclair, S. H., Co. 19 Situations Wanted. 20 Skinner Chuck Co. 8 Smethurst & Allen. 37 Smith-Courtney Co. 9 Smith, S. Morgan, Co. 33 Smith & Kilby Co. 32 Snediker & Carr. 24 Snow Steam Pump Works. 32 Southeastern Lime & Cement Co. 6 Southern Fdry. & Mch. Works. 21 Southern Iron & Equipment Co. 22 Southern Iron Works. 32 Southern Locomotive & Supply Co. 38 Southern Railway Co. 31 Southern Real Estate Exchange. 21 Spear's, Alden, Sons & Co. 24 Sperry, Jones & Co. 205 Springfield Gas Engine Co. 16 Sprout, Waldron & Co. 34 Stafford, F. M., & Co. 205 Standard Coal Co. 8 Standard Mill Supply Co. 28 Standard Oil Co. 24 Standard Paint Co. 25 Standard Tool Co. 38 Stanley Electric Mfg. Co. 37 Starr, B. F., & Co. 34 Steel Rail Supply Co. 22 Sterling Emery Wheel Mfg. Co. 24 Stern & Rushmore. 205 Stevens, H., Sons Co. 38 Stewart, Jas., & Co. 6 Stiles & Pladd Press Co. 8 Stillwell-Bierce & Smith-Vaile. 30 Stow Flexible Shaft Co., Ltd. 9 Struthers, Wells & Co. 14 Stuebner, G. L., Iron Works. 19 Sturtevant, B. F., Co. 19 Sturtevant Mill Co. 34 Sullivan Machinery Co. 35	U Union Drawn Steel Co. 23 Union Electric Co. 37 Union Iron Works Co. 22 United Electric Improvement Co. 37 U. S. Sanitary Co. †	V Valdosta Foundry & Machine Co. 14 Vaik & Murdoch Iron Works. 15 Valley Iron Works. 9 Vanduzen Co., The E. W. 33 Van Noorden, E., & Co. 6 Van Wier, Irwin. 33 Vitrified Wheel Co. 26	W Wals & Roos Punch & Shear Co. 21 Walker & Elliott. 35 Warren Chemical & Mfg. Co. 24 Washington Slate Co. † Watkins & Hardaway. 6 Watson, Benjamin. 22 Webster, Warren, & Co. * Weir Mfg. Co. 37 Western Electrical Supply Co. 10 Western Maryland Railroad. 31 Westinghouse Air Brake Co., The. 31 Westinghouse Elec. & Mfg. Co. 36 Westinghouse Machine Co. 14, 21 Wetherill, Robt., & Co. 15 Whaley, W. B. Smith, & Co. 6 Wheeling & Lake Erie Railway. 31 White, L. & J., Co. 27 Whitinsville Spinning Ring Co. 26 Whitney, Baxter D. 26 Wilkinson Mfg. Co. 15 Williams Bros. 33 Williams, Haskins, & Co. 22 Williams, I. B., & Sons. 11 Williams, J. H., & Co. 38 Williams, John L., & Son. 205 Williams & Schmid. † Williamsport Machine Co. 26 Willis, E. 21 Wilson Laundry Machinery Co. 36 Wingfield, Nisbet. 19 Wolf Co., The. 17 Wolf Co., Fred. W. 17 Wood, R. D., & Co. 32 Woodward & Stillman. 21 Worthington, Henry R. 18 Wright Co., The. 12 Wrightsville Hardware Co. 23

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